

# MARINE RECORD

ESTABLISHED 1878.

VOL. XXIII, No. 4.

CLEVELAND---JANUARY 25, 1900---CHICAGO.

\$2.00 Per Year. 5c. Single Copy.

## LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and improve the character of the service rendered to the public.

PRESIDENT.	
W. C. FARRINGTON,	Buffalo.
1ST VICE-PRESIDENT.	
CAPT. J. G. KEITH,	Chicago.
SECRETARY.	
CHARLES H. KEEP,	Buffalo.
TREASURER.	
GEORGE P. MCKAY,	Cleveland.
COUNSEL.	
HARVEY D. GOULDER,	Cleveland.
EXECUTIVE AND FINANCE COMMITTEE.	
JAMES CORRIGAN, Chairman,	Cleveland.
COMMITTEE ON LEGISLATION.	
GIBSON L. DOUGLAS, Chairman,	Buffalo.
COMMITTEE ON AIDS TO NAVIGATION.	
GEORGE P. MCKAY, Chairman,	Cleveland.

## THE LAKE CARRIERS' ASSOCIATION ENDORSES THE PLANS OF THE CHIEF OF THE WEATHER BUREAU.

At the annual meeting of the Lake Carriers' Association, held at Detroit, Mich., on the 17th day of January, 1900, the following resolution was adopted:

Whereas, Representative Wadsworth, of New York, has introduced House Bill No. 3988 for the re-organization of the Weather Bureau, upon plans submitted by Prof. Willis L. Moore, Chief of the Weather Bureau, who has had over twenty years' practical experience in every branch of the Weather Bureau. The plan of Prof. Moore for the introduction of the merit system and the retirement of meritorious officials after reaching the age limit, is approved by the Lake Carriers' Association. The value of the Weather Bureau on the Great Lakes, in the investigation of the lake levels in connection with the rain and snow fall of the lake basins, the display of wind signals and issuance of storm warnings for the preservation of lives and property is thoroughly appreciated; therefore, be it

Resolved, That the Lake Carriers' Association endorse House Bill No. 3988, introduced by Representative Wadsworth, of New York, and we respectfully request our representatives in Congress to use all proper means to aid in the passage of this bill.

(Signed) C. H. KEEP,  
Secretary Lake Carriers' Association.

## AN INTERNATIONAL WATERWAY COMMISSION.

The MARINE RECORD has held forth and persistently advocated the formation of an international commission whose province it would be to conserve the best interests of lake commerce in the maintenance of lake levels. Steps are now being taken to compile the correspondence, communications and other writings on this subject, and to publish same in pamphlet form for the more complete information of members of Congress, as well as those prominently engaged in lake transportation and commerce.

In our six months' campaign along the lines of the foregoing advocacy, the RECORD is pleased to acknowledge and thank the influential and old-established northern Ohio daily, the Plain Dealer, Cleveland, for its eminent support of the measure, as set forth week by week in the RECORD. The Plain Dealer's editorials and articles on the subject of conserving the natural lake levels has been a source of information to thousands of interested persons, who, otherwise, would have been in ignorance regarding the subject, but for

the wide reaching influence and circulation, of this, let us say, metropolitan daily.

In this connection we are again pleased to quote an editorial on this subject from Tuesdays Plain Dealer as follows:

"The resolution offered in the Senate yesterday by Senator Platt, of New York, and referred to the committee on foreign relations, is the first step in an inquiry of practical importance to the navigation and commercial interests of the lakes. It authorizes the President to invite the Government of Great Britain to join in the promotion of an international commission, to examine and report on the division of the waters that are the boundaries of the two countries.

"The need for such a joint investigation as proposed is shown by the discussion that has arisen concerning the effect which some enterprises, begun or contemplated, for the partial division or regulation of the waters of the lakes may have upon the waterways or the coasts of the United States or Canada, or both.

"The suggested series of dams at the foot of Lake Erie, for the purpose of regulating the level of that lake and of the channels between it and Lake Huron, is one of the works in question. Objection has been already made that the obstruction to the flow into the Niagara river would lower the levels at Lake Ontario harbors and in the St. Lawrence canals, and would flood low lands on both the Canadian and American sides of Lake Erie.

"The projected Canadian canal from Lake St. Clair into Lake Erie, has been objected to on account of its diversion of water from the Detroit river and the consequent diminishing the depth over bars and shallow places, which are already sufficiently dangerous.

"The power canal cut through the town of Sault Ste. Marie has been the subject of serious inquiry as to its probable effect, when opened, upon the depth of water in the Sault canal. Here, also, there is ground for possible international objection as, if it should affect the working of the canal on the American side of the Sault it would also affect the Canadian Sault canal.

"The Chicago drainage canal obtains its supply from Lake Michigan, an exclusively American lake, and therefore is not so immediately involved in the proposed investigation. But it may be claimed that the sending of lake water to the sea by way of the Mississippi, instead of by the chain of lakes and the St. Lawrence, as heretofore, may, in some degree, affect the depth of water in the boundary channels, and is, therefore, a subject of international inquiry.

"Engineers have differed in their published opinions as to the effect of the several proposed divisions, those who are more or less directly connected with the enterprises minimizing the probable effect, or denying that any perceptible change would result, while others insist there would be an appreciable difference. The possibility of there being an injurious result on one or other side of the boundary makes it advisable that a joint investigation and understanding be had before such works of engineering magnitude and heavy cost are entered upon on either side of the line.

## THE CHICAGO DRAINAGE CANAL.

In the case of the State of Missouri vs. the State of Illinois, involving a petition for an injunction against the Chicago drainage canal, the United States Supreme Court on Monday decided to permit the Attorney General of Missouri to file his bill making the summons to the defendants returnable on April 2d. Regarding a temporary restraining order prohibiting the operation of the canal during the pendency of the proceedings in this court, Chief Justice Fuller of the U. S. Supreme Court at Washington, said that it was impossible for the court to exercise original jurisdiction in a suit between states without giving notice; that six days were required for return, and that nothing could be done before the date upon which the service was made returnable in the main proceeding on April 2d.

AFTER presenting the arguments for and against the system of superimposed turrets, the "Engineer" reaches this conclusion: "On the whole, then, whilst we are bound to admit that the saving in weight and the reduction of machinery is advantageous, we do not see that sufficient is gained to balance the many disadvantages of having all the eggs in one basket and all the weapons in one hand."

## DETROIT SHIPMASTERS ENDORSE THE WORK OF THE WEATHER BUREAU.

The following preamble and resolutions met with unanimous approval at a regular meeting of the Detroit Shipmasters' Association.

Whereas, It has come to the knowledge of the members of the Shipmasters' Association of the Great Lakes that H. R. Bill No. 3,988 has been introduced by Representative Wadsworth, of New York, for the re-organization of the Weather Bureau upon the plans submitted by Prof. Willis L. Moore, Chief of the Weather Bureau, who has had over twenty years practical experience in the Weather Bureau. The plan of Prof. Moore for the introduction of the merit system in the Weather Bureau, based on the experience obtained from twenty years active service in all branches of the Bureau, is heartily approved by the Shipmasters' Association, Lodge No. 7. The valuable services of Prof. Moore in devoting special attention to the marine interests of the Great Lakes, for the benefit of vessel masters, is highly appreciated, therefore be it

Resolved, That the members of Shipmasters' Lodge No. 7 heartily endorse H. R. Bill No. 3,988, introduced by Representative Wadsworth, of New York, and we respectfully ask the cordial support of our Representatives in Congress, to use all means in their power to encourage and assist in the passage of said bill. (Signed) WM. H. HOFFMAN, Sec.

## COMPETITIVE BOILER TESTS.

From London comes the statement that the Admiralty is disposed to have a sort of a "battle of the boilers," a competitive test of the Highflyer against the Minerva. The two ships are the same in displacement and dimensions, but differ in armament, engines and boilers. The Highflyer's engines develop 10,000 horse-power with natural draughts; her boilers are of the Belleville type, 18 in number, fitted with economizers. The Minerva's engines develop 9,600 horse power, and her boilers, eight in number, are of the Scotch type. There would be six trials in the proposed test. In the last two the duration of the contest would be 12 hours at the highest speed possible. In one of these two the Minerva is to start with three boilers only lighted, and at a given signal to light up the rest. The Highflyer will start with six boilers lighted, and at the signal will light up the other twelve. This test is to ascertain the speed at one-third the full boiler power, though, as a matter of fact, the Minerva's three boilers are slightly in excess of one-third power. In the other, each ship will start with one-third of the boilers alight, but in the Minerva the others will be banked, and in the Highflyer fires only laid. After steaming from 18 to 36 hours at a low speed, at a given signal the two will spread fires or light fires and put on all available steam. Each ship will, during the trials, carry an inspector of machinery, two additional engineer officers, and a number of extra engine-room ratings. The trial will be of immense importance, as it will finally and definitely decide whether the water-tube or the Scotch boiler is the better type.

THE Midvale Steel Co., Philadelphia, Pa., two years ago employed 1,000 hands. They now have 2,800, and will add 2,000 more very soon, when improvements costing \$800,000, now under way, are completed. The improvements, the most important of which will be completed in a little while, include the building of open hearth furnaces for the manufacture of steel. Lathes and machines for boring cannon are now being put into position. Each is 60 feet long and has jaws 12 feet in diameter. An electrical plant is also being finished that will supply the machinery with the necessary motive power. Recently the company received an order for the manufacture of tires to be used on locomotives in Great Britain.





## PORT HURON.

*Special Correspondence to The Marine Record.*

The barge E. E. Tyson is receiving some needed repairs.

Capt. Slyfield, is building a new house on the corner of Fish and Thirteenth streets.

Capt. Wm. Forbes, W. E. Rice, Baby and J. C. McLean, were at Detroit, attending the Lake Carriers' meeting.

Capt. Thomas Currie will make extensive improvements to his steamer New York and barges Keaton, Grande and Wadd.

Capt. George Tebo and Capt. Cyrus Sinclair, of Chicago, came here to attend the annual party of the Shipmasters' Association.

Large quantities of ice are running in St. Clair river and it is said the river is blocked at a point above Marine City. A great deal of the ice is very heavy.

A. A. Pomeroy, of Cleveland, O., who has spent the last three years compiling a history of the lakes, for a Chicago house, is spending the week in Port Huron.

There is a good demand for boats this winter but the price of any of them that are for sale would bankrupt a man unless he had a bank account like Jay Gould.

The M. T. Green is receiving new decks, hatch coamings, and other repairs to her hull, and also her boiler is being overhauled by the Tunnel City Boiler Co.

Capt. Hughes, of Gillett street, has been entertaining his uncle, Capt. John Cornwall, of Detroit, and his cousin, Capt. Alton Cornwall, of the Inman Tug line, of Duluth.

The steamer Welcome on Friday brought three carloads of salt from St. Clair to Port Huron. There was not enough ice in the river to interfere with the progress of the boat.

Last season there were 3,450 messages sent out by Ed. J. Kendall, the marine reporter, and about the same number received. This is an evidence of the amount of business transacted at that office during navigation.

At the Phoenix Iron Works a new triple expansion engine has just been completed for one of the new boats now building at the Jenks shipyard in Black river. The engine will be placed in the boat sometime next week.

The local inspectors of steam vessels have received the testimony of witnesses from Chicago in the collision case of the steamer Ketcham with the schooner Typo, off Presque Isle last fall. The investigation will be held the last of this week. The testimony of second mate Kenyon of the North Star in the collision with the Siemens in the St. Mary's river last fall, was taken here on Saturday. These cases will give the local inspectors a chance to distinguish themselves.

The century banquet and ball of the Shipmasters' Association was held at the Hotel Harrington on Thursday last, and was attended by 300 people. The handsome dining room was used as a dance hall and supper was served in the reading rooms and parlors. Several out of town captains were present. Lloyds orchestra furnished the music. The party was one of the largest ever held at this popular hotel. It was four o'clock in the morning when the last dancer left for home and the music ceased.

Capt. S. H. Burnham is negotiating for the purchase of a small steamer to take the place of the steamer Mary recently sold to Benton Harbor parties. Capt. Burnham says that during the coming season he will extend the trip of his boat to the Flats stopping in all of the popular resorts, including Harsen's Island and Stag Island. On Monday next Capt. Burnham will place the Conger on the river route and regular trips will be made as long as the ice will permit. The old time-table will be followed.

The answer of the Catholic Mutual Benefit Association in the matter of Capt. John B. Brown and wife was filed in the circuit court on Saturday. It will be remembered that Capt. and Mrs. Brown and infant son were drowned through the foundering of the steamer Margaret Olwill on June 29 last. The life insurance policy was made in favor of the wife. In case Mr. Brown died first the heirs of Mrs. Brown are entitled to the \$2,000, the amount of the policy. In case Mrs. Brown died first the money would go to Capt. Brown's father, sisters and brothers. The association is perfectly willing, and in fact anxious that the relatives of both husband and wife get together and determine who died first, so that the amount of the policy can be paid. This is a similar case to the loss in the same manner of Capt. and Mrs. Albert Meswald through the foundering of the Wocoken, also on Lake Erie some years ago. It is within my personal knowledge to say, that according to the laws of France, it is always assumed that the woman is the first to perish under such circumstances.

## DULUTH-SUPERIOR.

*Special Correspondence to The Marine Record.*

There were several bids for adding 1,200 feet to the Ashland breakwater at the inner end, that of Hugo & Time, of Duluth, \$20,976, being the lowest. Peter Ferguson, of Ashland, bid \$21,600. Butler & Ryan, of St. Paul, \$21 per foot, and E. Dimie, of Duluth, \$24.44 per foot.

There have been several interesting tests at the Washington Navy yard of a working model boat No. 7 of the Holland submarine type. Boat No. 7 is designed to have many improvements over the Holland. Its dimensions will be much larger than that vessel and will carry five, instead of three, Whitehead torpedoes. It will have an automatic ballasting, available in fresh or salt water.

The Boston Coal Dock & Wharf Co., with a coal dock at West Duluth, has decided on making improvements that will call for the outlay of about \$20,000. A fourth Brown hoist will be put on the dock before the opening of navigation; also a hard coal conveyor. The coal handling capacity of the dock will be increased more than 25 per cent. The Ohio Coal Co. is said to be still figuring on its proposed improvements. It is figured on to extend the company's dock 500 feet and the plans have been drawn. No contract, however, has been awarded as yet.

The reports from all over the Lake Superior mining region are that stockpiling progresses faster than in any preceding winter, and that stock docks will contain more ore next spring than at any past opening of navigation. There were very small stocks of ore at the close of navigation; a little at a few mines of the Gogebic, practically none at the Marquette or Menominee, none on the Vermillion to speak of, and none on the Mesaba, except at the Rockefeller mines at Hibbing, where some stocks have been held over for a better price and because of the delay in lake shipping.

The coal men have finally figured out the situation at the head of the lakes as regards stocks. The situation is the most remarkable in the history of Duluth and Superior, as coal receiving points. One coal man says that there is not a ton of unsold soft coal on the docks here. Another confirms the statement in another way. He says that there is no soft coal here for anybody except for regular customers. There is a total of 500,000 tons of soft coal here, but it is owned almost entirely by the railroads, and such as is outside of their control is held for distribution among the regular customers of the coal companies.

The unseasonable and protracted thawing weather which has prevailed since the beginning of the year, is causing great uneasiness and serious loss to lumbermen. Probably 18,000 men are employed in the Lake Superior lumber camps this winter, yet the cut will be reduced. There is also danger of slack water for the spring drives unless heavy snow and freezing weather come quickly. The situation is the more serious because of the enhanced demand for pine lumber and the shortage in stocks of manufactured lumber on hand at mills and yards. There is certain to be considerable advance in the price of all the better grades of lumber next summer.

Contracts have already been made by the Eastern Minnesota with different lines of boats to carry about 2,000,000 tons of iron ore down the lakes from the Great Northern's two ore docks on Allouez bay. The new boats of the American Steel & Wire Co. will carry all they can of this ore and the docks are just suitable for their loading as the chutes are extra high. The charters made on ore for the coming season are at the rate of \$1.25 per ton. Coal rates are according to present quotations 50 cents per ton and it is said that future charters are likely to be at a higher figure. Lumber charters are being made at \$3.25 per M. feet. Last season the contracts were at the rate of about \$2.25 per M. feet but the uncharted boats often secured \$4 or up to \$5.50.

The largest steamer ever built or floated on the lakes now hails from Duluth, and three more like her are to be enrolled here. The Pittsburgh Steamship Company will give us the prestige of fully 60,000 tons of shipping hailing from here this season. This is the fleet of the Oliver Iron Mining Company and five-sixths of that stock is owned by the Carnegie Steel Company. With the Northern, Bessemer, Pittsburgh and American Steamship Companies' fleets carrying the name of Duluth across their sterns, and the Davidson, with other vessels of the largest type, hailing from here, Duluth is likely to give the go-by to all lake ports in the volume of her enrolled tonnage, and this we take as another slight indication of positive future commercial supremacy.

Anent the "Soo" power canal, the Evening Telegram, Superior, says: A resolution introduced in Congress this week discloses the fact that the great water power project at the "Soo" has been carried on without other license than the consent which was given by Mr. Alger when he was Secretary of War. While he may have had authority to permit the diversion of a portion of the river for this purpose, there were questions of the effect thereof upon navigation which he was not competent to decide and which, in fact, call for very comprehensive investigation by experts before answer can be given. With a dearth of snowfall such as will mark this winter, the conservation of the water of Lake Superior becomes insistent, and the "Soo" power scheme should, and doubtless will, be halted till it is determined whether it be a menace to the vast interests of commerce.

The Northern Pacific R. R. Co. has bought the Miller dock property, which is on the east side of the dock property between Sixth and Seventh avenues west, and which is directly approached by the Sixth avenue viaduct. The Miller dock is a fine piece of water front estate. It is separated from the dock frontage purchased by J. J. Hill a few months ago

by an avenue 65 feet wide. The Northern Pacific acquires a dock 760 feet long and about 233 feet wide on Commerce slip for which it pays \$217,000. The Hill frontage adjoining cost \$187,000. The Northern Pacific road appears to be making preparations for extensive lake and rail operations in Duluth. It is but a few weeks ago that the company bought the site of the old Duluth roller mill, thus giving it considerable additional dock property in connection with its present dock between Seventh and Eighth avenue West.

There is every indication here that the season of navigation will open earlier than usual. Up to the present, there has been no ice to stop shore navigation, the little steamer Suit has been running continuously along the north shore, tugs are at work in the harbor here, and, with these conditions at the end of January, the weather can't get hard enough to make a late opening. It is now certain that there will be a tremendous amount of traffic at the "Soo," so those in charge had better be prepared for about a 30,000,000 ton season traffic. Capt. Alex. McDougall used to keep the canal officials and others down there pretty well keyed up. It was a case of work and facilitate traffic with him, and that, too, with a minimum of red tape officialism. This is the spirit that they want to start out with this spring, and I have no doubt but what they will. If what we hear at this end of the route is right, Col. Lydecker, of the Corps of Engineers, takes great interest in the commerce and transportation of the lakes, and as he is in charge of the gateway to Lake Superior, we are already assured of the best sort of supervision there.

## DETROIT.

*Special Correspondence to The Marine Record.*

Representatives of the Detroit Ship Building Co. are attending the annual meeting of the Board of Supervising Inspectors of Steamboats held in Washington, D. C., this week.

The Northern Transportation Co. has sold the freight steamer E. M. Peck to the Calumet Transit Co., of Chicago. The steamer will probably be employed in carrying ore from Escanaba to South Chicago. She is the only vessel owned by the company, which was organized for the purpose of purchasing her. The Northern Transportation Co. will probably not build a new steamer to replace the Peck this year.

Postmaster F. B. Dickerson has undertaken to get the salaries of the three marine mail carriers, at work on the river throughout the season of navigation increased \$200 per annum, on account of the hazardous and disagreeable work they perform in delivering mail to passing vessels. To gain this end, he has secured the co-operation of the postmaster-general and has written letters to parties in different districts asking them to write their congressman to support the measure.

Coal charters are by no means brisk though the rates offered, with good dispatch guaranteed, are better than has been offered for some time past. Ohio ports to Portage is quoted at 55 cents, 60 cents to Escanaba, Green Bay, Manitowoc or Sheboygan, owners are holding off on Milwaukee charters for a better rate. 75 cents is offered to Chicago, \$1 asked. Figures have been asked for on the construction of a Welland canal steel steamer of about 3,000 tons. The specifications are very inclusive and call for a first class hull with every modern improvement in the equipment. It is not known that the order has been placed but as the Jenks Ship Building Co., of Port Huron, as well as the Craig Ship Building Co. at Toledo have enough work on hand, the new boat is likely to go to one of the yards of the American Ship Building Co.

The experience of Lieut. Col. William A. Jones, as related in H. R. Document No. 248, recalls the story told of the late General Orlando M. Poe, Corps of Engineers, U. S. A., when his accounts were held up because he called in a tug to extinguish a wharf fire without first advertising for proposals. On Dec. 23, 1898, the light-house tender Jessamine collided with and damaged the schooner Harriet C. Kerlin, through no fault of the latter. Col. Jones, as Engineer of the 5th Lighthouse District, asked whether funds for the repair of lighthouses could be lawfully applied to the payments necessary for the repair of the schooner. He received authority from the Secretary of the Treasury to make such payments, but his accounts in the matter were held up by the Auditor for the reason that "under the decisions of the Comptroller of the Treasury, there appeared to be no authority in law for said payment."

## MANITOWOC.

*Special Correspondence to The Marine Record.*

The Manitowoc Steam Boiler Works are supplying the boilers of the steamer Olympia with six new furnaces.

The Milwaukee Dry Dock Co. and the Sheriffs Manufacturing Co. are very busy doing repair work on a number of vessels in winter quarters at this port.

At Burger and Burger's shipyard the steamer Lawrence has been in dry-dock and received general repairs amounting to \$63,000. She is also receiving an entire new electric light plant. Her engine and boiler has received a thorough overhauling and repairing. The steamer Raleigh went into dock Thursday for general repairs. The barge Tokio is receiving new floor and recalking all over. M.A. Bradley's two steamers, George Stone and City of Cleveland will receive new upper decks, which will be placed flush with the rail to increase their carrying capacity.



## CHICAGO.

*Special Correspondence to The Marine Record.*

Capt. James Davidson, of Bay City, and Capt. James Taylor, of Marine City, were in this city Tuesday.

Capt. Ira B. Mansfield, of the steamer Sacramento, is here representing the Inland Lloyd's. Capt. Fred D. Weimer will assist him in the surveys.

The barge Frank Ewen was chartered for corn to Buffalo at 3¼ cents for storage and delivery. She was towed to South Chicago Friday, to load.

The Chicago Pneumatic Tool Co. have just received an order from the Kawasaki Docks Yards, of Kobe, Japan, for 29 tools and an electrically driven air compressor.

The Marine Engineers' Beneficial Association No. 4, of Chicago, gave their twenty-fifth annual reception and ball at the Medinah Temple, Wednesday, January 17, 1900. It was largely attended and was a great success in every way.

The Treasury Department has promised to station a revenue cutter or harbor patrol at this port, on the opening of navigation, to replace the Calumet, which was sent to the Atlantic coast at the outbreak of the Spanish-American war.

Several of the lake front steamers are fitting out to take excursion parties down Chicago's new canal on Saturday and Sunday next. The current is running steadily up the river, and the water coming in from Lake Michigan has already materially improved the water in the river.

The steamer Madagascar and consorts S. M. Stephenson and Fanny Neil were chartered Monday, for corn to Buffalo at 3¼ cents for storage and delivery. The Stephenson and Neil went to the Indiana elevator Tuesday, and took on their cargoes. The Madagascar will load on Thursday.

The Barnet Record Co., of Chicago, has secured the contract for the construction of the Conners' syndicate grain elevators in Montreal. S. Record, says work will commence immediately on an elevator with a capacity of 1,000,000 bushels, with annexes for another 1,000,000 bushels. Most of the steel for construction will be secured in the United States.

At Miller Brothers' ship yard the composite steamer Niagara is in dock having some frames straightened, considerable new bottom planking and bottom calking. The barge Galatea is receiving a new forefoot and some bottom calking, the steamer Nyanza was in and had her butts calked. The steamer Oscoda received a piece of new keel and had her butts calked.

A movement is on foot among the government contractors, breakwater, pier builders and dredging companies to form a trust. Promoters are said to be hard at work on the project, with every prospect of forming a close trading ring out of the syndicate. They are of course all in it for the extra pelf to be screwed out of the government river and harbor work on the lakes.

The Shaw Electric Crane Co., of Muskegon, Mich., will have a 30-ton electric traveling crane in the United States building at Paris. The capacity of the main hoist is 30 net tons; capacity of the auxiliary hoist, 5 net tons; span, 33 ft.; voltage, 220, direct current. This crane is furnished for exhibit by their sales agents, Manning, Maxwell & Moore, 85 to 89 Liberty street, New York.

At the yards of the Chicago Ship Building Co., the steamer Senator is in dock for repairs to bottom plating and stern-bearing. The steel barge Madeira, built by the Chicago Ship Building Co. for the Minnesota Steamship Co., Cleveland, launched on Wednesday afternoon, is of the following dimensions: 450 feet over all, 50 feet beam, 29 feet molded depth, carrying capacity 8,000 tons; she will be equipped with all modern appliances.

Johnson & Knudson, ship carpenters, are supplying the steamer Thomas Cranage with a new upper deck and hatch coamings; the steamer Madagascar with a new bulk-head aft and calking her deck and quick work, and some new hatch coamings; the steamer H. Luella Worthington part new deck and new houses on main deck forward and aft for the crew; the steamer Jesse Spalding some new floors; the barges Nirvana and Galatea some repairs and calking; the bark Ida Corning some new deck beams and deck and calking.

Henry W. Cook, for several years vessel and insurance agent here, has gone to Jacksonville, Florida, to become manager of a line of steamers running between Jacksonville and Philadelphia. He has been succeeded here by Capt. Samuel R. Chamberlain, who has taken Mr. Cook's Board of Trade membership, also his schooner Bliss, and his business and office at 6 Sherman street. Capt. Chamberlain hopes to receive the patronage of some of the vessel owners, as he intends to give strict and reliable attention to all business entrusted to him.

The old passenger steamer Chief Justice Waite has at last been condemned. For years the Waite has been regarded as unseaworthy. Supervising Inspector C. H. Westcott, of Detroit, passed the boat last year on condition that the captain would keep close to shore and not go farther away than Manhattan Beach. The Waite was originally a revenue cutter, but for many years has been on short excursion routes. Last summer the complaints of gambling games resulted in a raid in which captain, crew, and passengers were arrested, but were later discharged.

## CLEVELAND.

*Special Correspondence to the Marine Record:*

The steamer Superior City is in drydock at Lorain. Five of her bottom plates are damaged.

The Lake Michigan coal rate kept at 60 cents this week, though several owners are holding for a better rate, as the majority of tonnage is fixed ahead on iron ore charters.

The Shipmasters give their annual ball this evening in the Chamber of Commerce hall. Quite a large number of visitors from other ports are here for the purpose of attending the reunion.

The Chisholm & Moore Mfg. Co. say that the demand for their pneumatic cranes and hoists is heavier than at any time during the past year. The new additions to their plant have been put into operation.

Mr. Andrew Haas has been appointed chief engineer of the new steel steamer John W. Gates, owned by the American Steamship Co. (The American Steel and Wire Co.), Chicago. This fleet will hail from Duluth, Minn.

The Cleveland-Cliffs Iron Company held its annual meeting on Wednesday and elected the following directors: J. H. Wade, William G. Mather, J. H. McBride, E. R. Perkins, Samuel E. Williamson, W. S. Tyler, J. H. Hoyt, Samuel Mather, Peter White.

Capt. John Mitchell and wife leave New York to-day on the steamer Augusta Victoria for Mediterranean ports. Capt. Geo. P. McKay and wife have started for Pasadena, Cal. Capt. Thos. Wilson and party will also cross the Atlantic, passages having been already engaged.

Capt. Townsend has sailed in the Mitchell fleet for the past ten years. His first boat was the steamer Ed. Smith, which he took charge of in 1890. A few years later he brought the steamer R. L. Fryer out and sailed her until he took command of the steamer W. H. Gratwick. He will sail the steamer John J. McWilliams this season.

Mr. Edwin S. Mills is the Cleveland representative of the Carnegie Steel Co. and the Oliver Ore Mining Co. Capt. E. Day, for several years in charge of the Conneaut ore docks and formerly superintendent of ore docks here, has been appointed by Mr. Mills as marine superintendent of their large fleet of boats, with headquarters at this port.

At the annual meeting of the Wilson Transit Co. Capt. Thomas Wilson was elected president, general manager and treasurer; R. McLaughlin, vice president; H. D. Goulder, secretary; A. W. Thompson, assistant secretary. The board of directors is as follows: Capt. Thomas Wilson, R. McLaughlin, W. D. Rees, J. E. Upson and George L. Quayle.

The Cleveland & Buffalo Transit Line of freight and passenger steamers appears to be one of the most successful transportation companies on the lakes. Ordering new steamers built, declaring dividends, and building new freight depots seem to come along regularly as the annual routine. Mr. Newman will soon, or has already, earned the sobriquet of "Dividend Tom."

The Cleveland Twist Drill Co., have equipped a restaurant for the benefit of their employees. The company also intends to establish a free library where the men may obtain books and periodicals for home reading. It is stated that the efforts of the company in this direction have been received with marked appreciation by its employees. The firm will have an exhibit at the Paris exposition.

Wm. Lewis, of the firm of Lewis & Crane, lumber dealers, shippers and brokers, Seattle, Wash., is on an Eastern tour in the interests of his firm. When at this port a few days ago, Mr. Lewis informed me that they had already shipped several consignments of Washington fir East, for ship building purposes. For decks, outside planking or spars, Douglas pine is considered excellent, as it works easy and takes a fine finish. It is also greatly used for light and finishing work on vessels.

The local managers of the Great Lakes Towing Co. are holding a re-union here this week to talk over the situation at the various ports and equalize towing charges, etc. Those in attendance from out of town are: Captain B. B. Inman, of Duluth; James Sinclair, of Chicago; C. D. Thompson, of Port Huron; R. P. Thompson, of the "Soo;" L. F. Lautenslager, of Buffalo; W. H. Hall, of Erie; A. S. Hand, of Conneaut; Captain Philip Scheld, of Ashtabula; and S. E. Leonard, of Lorain.

A bill has been favorably reported to Congress, appropriating \$25,000 for a statue to Commodore Perry the hero of Lake Erie, to be erected at Put-in-Bay, O. It is to be hoped that when the memorial has once been erected it will not be chased around, transplanted and generally hornswoggled from Dan to Beersheba like the pedestal in this "neck of the words" has been. I would suggest that the new statue be given good holding ground, moored all fours and given the best of ground tackle for an uphill drift.

The names of John W. Gates, Isaac L. Elwood, Wm. Edenborn and James J. Hill have been selected for the four 500-foot steamers of the American Steamship Co., that are now under construction, with the expectation that they will be ready for service by April 15. These gentlemen are all prominently connected with the American Steamship Co., which is the vessel-owning organization closely allied with the American Steel & Wire Co., and all attended the launch of the first steamer of the fleet from the Lorain yards of the American Ship Building Co. on Saturday last, with the exception of J. J. Hill.

The season of navigation of the Cleveland & Buffalo route opened April 29th last year and closed December 1st. The steamers City of Erie and City of Buffalo were operated 216 days and made 211 round trips. During the season the two big steamers covered 80,323 miles and made 2,578 landings. The City of Erie, which was sailed by Capt. John Edwards, and the City of Buffalo, in charge of Capt. W. H. Smith, went through the season without a mishap. The boats did not miss a trip from the opening to the close of the season.

Capt. Thomas Wilford has been sailing for forty years and is recognized as one of the most successful masters on the lakes. He brought out the steel steamer J. H. Wade in 1890, and has commanded the steamer Samuel Mitchell since 1892. Whether he feels it or not, Capt. Mitchell doesn't look a day older, then he did a decade ago, Capt. Wilford attended the launch at Lorain on Saturday, and saw a craft put afloat that will carry as much as a fleet of twenty vessels could in early days. I thought he sorter looked flabbergasted when he took an end on observation of the 500 foot tank.

## BUFFALO.

*Special Correspondence to The Marine Record.*

Wm. Russell, of the firm of Russell & Watson, Main St. left for Cleveland on Thursday on business for his firm.

Mr. John Gordon has filed a petition in bankruptcy. A hearing will be held February 2d to pass upon the question of liabilities and assets.

Shippers of anthracite at this port, as well as at Erie, Pa., are not getting tonnage, and it now looks as if Buffalo would have to take the lead in again advancing rates, as she did last season.

Duluth shippers are offering 3¼ cents on wheat at the early opening of navigation, but it is not learned that they have secured any tonnage at this figure, as it is about 4 cents less than the going rate on iron ore.

Chief Engineer Bardol, of the Bureau of Engineering, is now at work figuring on the cost of constructing a canal from Buffalo Creek to Lake Erie, at the Tift farm. The cost of the work, it is thought, will be about \$300,000, exclusive of land damage.

On February 10, bids will be opened here for the construction of some very much needed additions to the light-house depot, including a building for the light-house engineer, and also store-houses and shops for workmen. All will be on the government property adjoining the life-saving station at the mouth of Buffalo creek.

Announcement has been made by the Northern Steamship Co. that it will begin running its passenger steamers, the North West and North Land, a week earlier than usual. Both steamers are wintering here, and the first will make a trip up the lakes on Tuesday, June 5. Arriving at Duluth, the steamer will make her first trip down the lakes, leaving that port on June 9.

There is any amount of repair work at the Buffalo drydock—more, in fact, than can be promptly turned out. The drydock has 300 men on its payroll, all on repair work. The Union drydock is trying to get at work on its steel steamer contracts and lately received a large lot of material for the Lehigh liner so that she can be laid down at once. The wait has been a long and vexatious one, especially as it has been necessary to refuse other new work on that account.

Capt. M. M. Drake doesn't think it is necessary to have a grain inspector as a permanent feature at this port. Last season Bishop Quigley appointed Timothy P. Donovan to perform this function. The arrangement is considered to have ended with the season of 1899, and there is now a clean slate for a new understanding. "I think there is enough business ability both on the side of the men and the Lake Carriers' Association to take care of this without any intermediary," said Capt. Drake.

A committee has been appointed to secure the establishment by the United States government of a life-saving station at Dunkirk. There is no station between this port and Erie, a distance of ninety miles. What percentage of wrecks this stretch of coast shows on the wreck chart is not heralded. Dunkirk wants the station, anyway, if Uncle Sam can be cajoled into investing enough money to build and defray the annual cost of its up keep. Would Dunkirk want the station if the town had to build it?

The Kaiser Wilhelm der Grosse of the North German Lloyd line has created another record. She arrived at Cherbourg morning of January 10, after covering a course of 3,077 knots from Sandy Hook in 5 days and 16 hours, at an average hourly speed of 22.63 knots, the fastest ever made by a merchant craft on a trans-Atlantic trip. The time is 2 hours and 6 minutes better than her best previous eastward voyage and .02 of a knot better than her best previous average speed. Her daily runs were 500, 537, 523, 524, 523, and 470 knots.

The torpedo-boat destroyer Viper, built to the order of the British Admiralty by the Parsons Marine Steam Turbine Co. Limited, Wallsend-on-Tyne, has had her second preliminary trial. The test showed a mean speed of 34.8 knots in four consecutive hours on the measured mile, the fastest run being at the rate of 35.5 knots. The speed attained was in excess of that required by the contract, namely 31 knots. It will be seen that the latest clip exceeds 40 statute miles per hour, a breath-taking performance for old fogeys of a decade ago.



### IMPORTANT TREASURY DECISION.

#### SUSPENSION OR REVOCATION OF LICENSES OF MASTERS OR PILOTS ON GOVERNMENT VESSELS.

Opinion of the Solicitor.—It is discretionary with local or supervising inspectors as to what witnesses shall be subpoenaed in cases of investigation under sections 4450 and 4452, Revised Statutes.

Treasury Department, January 8, 1900.

Sir: Referring to your appeal from the decision of Mr. George H. Starbuck, supervising inspector, second district, in the case of suspension of license of Capt. Henry H. Stillings for alleged carelessness on June 19, 1899, in the management of the United States Army steamer General Thayer, causing a collision between that steamer and the merchant steamer Favorite, for which alleged carelessness Captain Stillings' license was suspended for ten days, the grounds of your appeal being, first, that Captain Stillings was not amenable to the steamboat-inspection laws, although licensed by the inspectors at New York as master and pilot of steam vessels, whilst pursuing his duties as master and pilot of a Government vessel, such vessels being exempt from the provisions of the steamboat inspection laws; second, that the supervising inspector, at the investigation of the charges before him, refused to subpoena a certain witness, one Capt. Edward McClelland, the captain who was in charge of the steamer Favorite at the time of the collision between that steamer and the steamer General Thayer, on behalf of the Government, that you might "examine and cross-examine him."

You are informed that upon your appeal being received by this Department it was submitted to the Solicitor of the Treasury, who, after careful consideration of the same, has reached an opinion adverse to both parts of your appeal. A full copy of the text thereof is inclosed for your information, this Department concurring in said opinion.

Respectfully,

O. L. SPAULDING, Assistant Secretary.

Mr. George W. Dease, New York, N. Y.

Department of Justice,  
Office of Solicitor of the Treasury,  
Washington, D. C., January 5, 1900.

Sir: I have the honor to return herewith the papers relating to an appeal to your Department from the decision of George H. Starbuck, Esq., supervising inspector of the Steamboat-Inspection Service for the second district of New York, sustaining the action of a local board of inspectors in said district who suspended, for a period of ten days, the license granted to Capt. Henry H. Stillings as master and pilot, for alleged carelessness, causing a collision between the steamers General Thayer and Favorite on June 19 last, at Liberty Island, in port of New York.

It appears that at the time of the collision Captain Stillings was in the service of the Quartermaster's Department of the Army, and was in charge of the General Thayer, an army steamer, proceeding on army business.

It is contended that while Captain Stillings was acting on this occasion he was in the army service, a separate department, with which the Steamboat-Inspection Service could not interfere, and, further, that he was not, in fact, "acting under the authority of his license" when the collision occurred, but was acting under the control and orders of the War Department.

It is further contended that the supervising inspector erred in refusing to summon before him for examination and cross-examination, as requested by counsel for defendant, one Edward McClelland, whose evidence was taken before the local inspectors when they held an examination of the case.

Upon this state of facts my opinion is requested:

"First. As to whether or not the steamboat-inspection service has jurisdiction over one of its licensed officers when acting upon a vessel of the United States in the capacity for which he was licensed and was only employed as such, because of such license, though the vessel upon which he was employed was not required by law to employ a licensed officer, attention being further called to the fact that the investigation in the case was made upon the request of the Government office in whose employment said licensed officer was at the time of the occurrence referred to herein.

The proceedings in this case were commenced under section 4450, Revised Statutes, which provides that the local inspectors shall investigate all acts of incompetency or misconduct committed by licensed officers while acting under the authority of his license, and describes the mode in which such investigations shall be conducted.

It further provides that if an officer shall be found incompetent or guilty of misbehavior, negligence or unskillfulness or has endangered life or has willfully violated any provision of this title (Title 52, R. S., Regulation of Steam Vessels), they shall immediately suspend or revoke his license.

This statute was enacted to afford a prompt and summary remedy, as exigencies might arise, for the care and protection of human life, and should, therefore, be given a liberal interpretation in the interest of public safety.

It has been held that a statute enacted for the public benefit should be construed in such manner that it may, as far as possible, attain the end proposed. Dwar. on Stat., p. 234 and cases therein cited.

Section 4430, Revised Statutes, provides that whenever any person applies to be licensed as master of any steam vessel, or sailing vessel of over 700 tons, the inspectors shall make diligent inquiry as to his character, and if after

careful inquiry they are satisfied that his capacity, experience, habits of life, and character are such as to warrant the belief that he can be safely entrusted with the duties and responsibilities of master, they shall grant him license for the term of five years, but such license shall be suspended or revoked upon satisfactory proof of bad conduct, intemperate habits, incapacity, inattention to his duties, or the willful violation of any provision of the title relating to the regulation of steam vessels. The purpose of this provision is to prevent men of intemperate habits, or who may be guilty of other bad conduct, as well as men who are wanting in experience or capacity, from acting as masters of vessels. A man may possess all the requisite qualifications when licensed, and afterwards become intemperate, or be guilty of bad conduct. Will it be seriously urged that his license as master can not be suspended or revoked because of his intemperate habits or bad conduct unless he should be drunk or his conduct be bad while he was on board a vessel and actually acting as master?

There can be no question that if, at any time during the life of a license, its holder should cease to possess the qualifications required by law his license may be suspended or revoked, even though he may not be at the time acting as master. If it should be held that a master's license could not be revoked for any cause that did not transpire while the holder was actually acting as master of some vessel, it might often happen that the holder of a license would be utterly unfit to discharge the duties of master.

Under section 4442, Revised Statutes, trustworthy and faithful persons possessed of the requisite knowledge and skill may be licensed as pilots, but such license shall be suspended or revoked upon satisfactory evidence of negligence, unskillfulness, inattention to the duties of his station, or intemperance, or the willful violation of any provision of the title in which said section is found.

What I have said as to the right to suspend or revoke the license of a master applies to a pilot.

Under section 4443, Revised Statutes, Captain Stillings was licensed in the double capacity of master and pilot.

The investigation in this case was made at the request of the Government officer who had employed him.

While it is a fact that Captain Stillings was at the time in the service of the Quartermaster's Department, and in charge of an army steamer, and that he could have been so employed even though he was not a licensed master or pilot, yet it is very certain that without such license he would not have been employed. No person should be permitted to hold such credentials when, for any reason, he is not a proper person, in contemplation of the law, to serve as master or pilot.

In Fisher v. Blight (6 U. S., 399), Justice Washington laid down this rule of construction: \* \* \*

"If from a view of the whole law, the evident intention is different from the literal import of the terms employed to express it in a particular part of the law, that intention should prevail, for that, in fact, is the will of the legislature." (See also 1 Story, 255.)

If Congress had intended that these licensed officers should not be liable for misbehavior, negligence, or unskillfulness while in the discharge of their official duties on board a public vessel of the United States, it would have so expressed its intention.

In my opinion such officers become liable to the provision of section 4450, Revised Statutes, when in the discharge of their official duties on board any steam vessel, public or private, and navigating any waters of the United States which are common highways of commerce or open to general or competitive navigation.

I will now consider the second inquiry, relating to the duty of the Supervising Inspector to summon such witnesses as the officer charged with misconduct or incompetency, or such as his counsel may desire to have summoned, while he is examining anew the findings of a local board in this class of cases, provided for in section 4452, Revised Statutes.

This section authorizes the Supervising Inspector, upon proper application, to examine a case anew, where, as in this instance, the board of local inspectors have suspended a license.

In so doing the law provides as follows: \* \* \* "Such Supervising Inspector shall examine the case anew and he shall have the same powers to summon witnesses and compel their attendance \* \* \* that are conferred on local inspectors. \* \* \*

The statutes make the investigation in either case imperative, and empowers the officers conducting the same to summon before them witnesses, and, after reasonable notice to the "alleged delinquent," they are required to proceed and examine the witnesses and if satisfied concerning the alleged incompetency or misconduct, they are directed by law to suspend or revoke the license.

No provision is made in the statutes for making any defense on the part of the delinquent officer beyond giving him a reasonable notice in writing, of the time and place of the investigation.

The statutes only contemplate that the officers charged with making these investigations may summon such witnesses as they think best for the purpose of assisting them in arriving at the actual facts in any given case. I am, therefore, of opinion that it would not be compulsory upon the part of supervising inspectors, hearing a case on appeal, to summon a witness at the request of the alleged delinquent officer or his counsel.

I am, very respectfully,

MAURICE D. O'CONNELL, Solicitor.

The Secretary of the Treasury.

### SHIPPING AND MARINE JUDICIAL DECISIONS.

(COLLABORATED SPECIALLY FOR THE MARINE RECORD.)

Admiralty Jurisdiction—Shipbuilding Contracts.—A contract for the building of a ship is not maritime, or within admiralty jurisdiction, and a lien given by a local statute for materials furnished in the building may be enforced in state courts. *Globe Iron Works Co. vs. Huron Transp. Co.*, 97 Fed. Rep. (U. S.) 872.

Wages—Advance Notes.—The owners of a fund derived from sale of a vessel cannot urge, as against the assignee of an advance note to seamen for a month's wages, the wages thereafter having been earned, and not paid, the rule, made for benefit of seamen, that the assignee of such a note cannot recover thereon. *The Staghound and The Gamecock* (Scheffler, Intervener), 97 Fed. Rep. (U. S.) 973.

Negligence—Defective Appliances—Proximate Cause—Burden of Proof.—When a seaman alleges that an injury was caused by a defective appliance, the burden of proof is upon him to satisfy the court that such defect was the proximate cause of his injury; the respondent's theory of the accident being equally or more probably from the testimony, the libel will be dismissed. *The Lydia M. Deering*, 97 Fed. Rep. (U. S.) 971.

Collision—Computation of Damages—Interest.—In determining the damages recoverable for a collision, where it appears that the amount expended by the libellant for repairs was extravagant, and the vessel was placed in better condition than before the collision, but under the settled rules there is no ground for disturbing the findings of the commissioner, the court will closely scrutinize the other items of damages claimed, and withhold any allowance for interest. *The Syracuse*, 97 Fed. Rep. (U. S.) 978.

Seamen—Wages—Rev. St. § 4527, providing that any seaman who has signed an agreement, and is afterwards discharged before the commencement of the voyage, or before a month's wages are earned, without fault on his part, is entitled to a month's wages in addition to wages earned, applies to a vessel which was known to the owner to be wholly unfit for the voyage, and in a smooth sea, in pleasant weather, proved so unseaworthy that it could not proceed, and was compelled to return in a state of wreck. *The Staghound and The Gamecock* (Scheffler, Intervener), 97 Fed. Rep. (U. S.) 973.

Maritime Liens—Ohio Statute—Ownership of Vessel while being Built.—A person contracting to have a vessel built to be paid in installments at fixed times, both before and after its completion, does not become the owner of such vessel until it is completed and delivered to him by the builder, although by the contract he is to furnish machinery to be used therein; hence one who sells him such machinery, which is delivered to and placed in the vessel by the builder which is still in his hands, is not entitled to a lien on the vessel therefor, under the Ohio statute relating to liens on water craft (Rev. St. Ohio, § 5880), which gives a lien for debts contracted on account of a vessel by the "master, owner, steward, consignee or other agent." *Globe Iron Works Co. vs. Huron Transp. Co.*, 97 Fed. Rep. (U. S.) 873.

### VISIBLE SUPPLY OF GRAIN.

As compiled for THE MARINE RECORD, by George F. Stone, Secretary Chicago Board of Trade.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY. Bushels.
Buffalo .....	2,251,000	313,000	184,000	84,000	1,013,000
" afloat .....	753,000	205,000			
Chicago .....	15,411,000	4,536,000	1,339,000	227,000	32,000
" afloat .....	85,000	932,000	158,000		
Detroit .....	595,000	401,000	109,000	11,000	56,000
Duluth .....	7,068,000	217,000	182,000	357,000	148,000
" afloat .....	248,000				
Fort William, Ont. ....	2,802,000				
Milwaukee .....	242,000	4,000		11,000	17,000
Port Arthur, Ont. ....	233,000				
Toledo .....	1,292,000	917,000	174,000	6,000	
Toronto .....	69,000		4,000		37,000
Grand Total .....	56,536,000	14,144,000	5,088,000	1,213,000	1,920,000
Corresponding Date, 1899 .....	28,273,000	26,061,000	6,986,000	1,797,000	3,354,000
Increase .....	3,000	126,000	21,000		
Decrease .....				37,000	112,000

While the stock of grain at lake ports only is here given, the total shows the figures for the entire country except the Pacific Slope.

### NOTICE TO MARINERS.

LIGHT-HOUSE ESTABLISHMENT,  
OFFICE OF THE LIGHT-HOUSE INSPECTOR, 9TH DIST.,  
CHICAGO, ILL., Jan. 22nd, 1900.

Notice is hereby given that the Eagle Bluff Light Station, Green Bay, Wisconsin, has been closed for the winter.

By order of the Light-house Board.

Respectfully,

F. M. SYMONDS,  
Commander, U. S. Navy, Inspector 9th Light-house District.

"My husband is plain-spoken; he calls a spade a spade."  
"So does mine; but I must decline to repeat what he calls the lawn mower."—Hardware Hints.



**LAUNCH OF THE "JOHN W. GATES."**

The steel cargo steamer John W. Gates, built to the order of the American Steamship Co., (American Steel & Wire Co.) was launched from the Lorain yards of the American Ship Building Co., on Saturday, January 20, at 3 p. m.

The weather was rather disagreeable, but probably a thousand people lined the river banks and filled the shipyard to witness the launch of the largest vessel ever built on the lakes.

A special and spacious platform erected at the bows of the vessel gave a point of vantage to the christening party and prominent visitors from Duluth, Chicago, Detroit, Buffalo and Cleveland, and the principal officers of the American Ship Building Co. Punctually at the time appointed, the signal was given and the hull started down the ways. Mrs. John W. Gates, wife of the managing owner, apparently perfectly composed and with that ease and gracefulness as if to the manner born, cracked a gaily-festooned bottle of "extra dry" fair on the stem of the huge hull, at the same instant the legend stole from her lips, "I christen thee John W. Gates," a moment later, and one of the most successful launches ever witnessed at a lake shipyard was accomplished. A well-timed, fair launch, and the entire hull waterborne at the same instant recorded the success of the day.

The Gates is a steel, single decked steamer. Her general hull dimensions are 497 feet over all, 478 feet keel, 52 feet beam and 30 feet molded depth. She is constructed of steel throughout, this material being used for masts, deck houses,

shaft driving a wheel 14 feet in diameter and 15½ foot pitch. Steam will be supplied at 250 pounds pressure by Babcock & Wilcox water tube boilers, having 140 square feet of grate surface and 6,800 square feet of heating surface. The boilers will be fitted with Learmonth purifiers, Crowe patent furnace and stokers working in conjunction with a forced draught system. An independent air pump of the cross, compound, simplex type, will be installed, as well as a complete set of pumps, including ballast pumps.

The coal bunkers will have a capacity of about 300 tons, this being amply sufficient for the longest round trip the vessel is likely to make.

For auxiliary machinery, the Gates will be supplied with Globe steam steering gear, Globe steam capstan windlass, American Ship Building Co.'s winding machines for handling wire, mooring and hauling lines, International Anchor Co.'s patent anchors, and a complete electric light plant operated by compound engines.

In point of carrying, where a twenty-foot channel is available, the Gates could load about 9,750 net tons of coal, or 8,705 gross tons of ore, its equivalent in wheat being 395,000 bushels, while on a draft of 18 feet, about 8,360 tons of coal, 7,460 gross tons of ore, or 278,000 bushels of wheat could be carried.

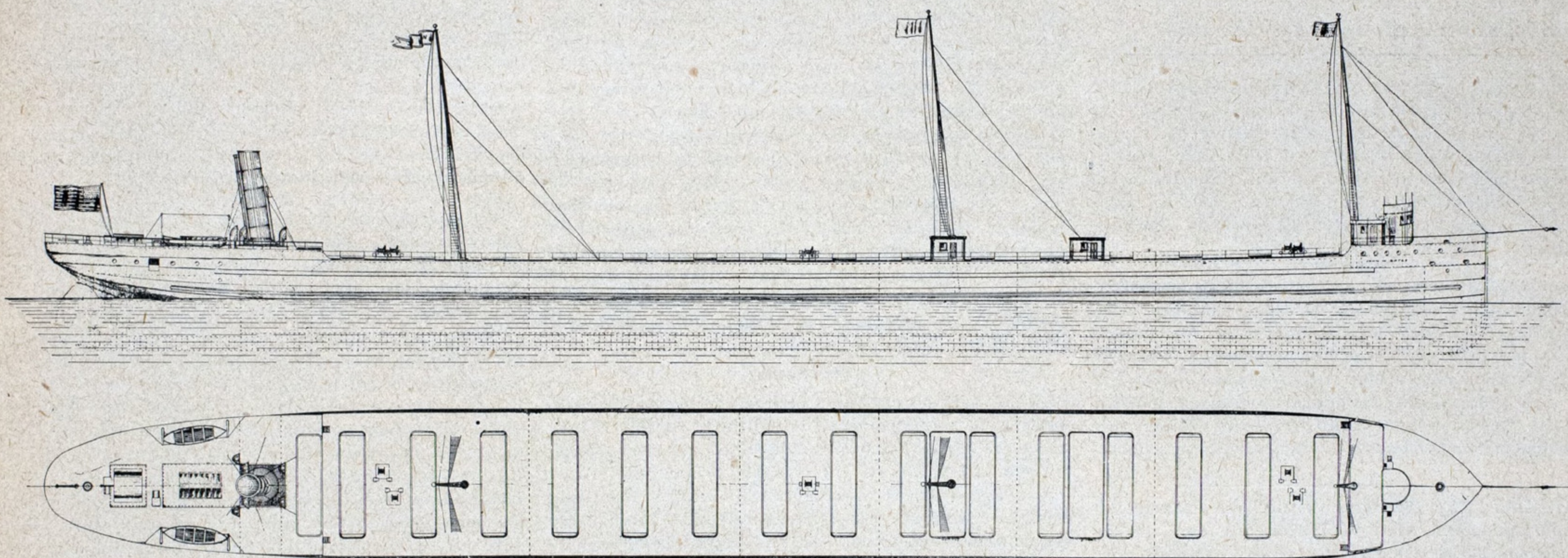
In general appearance the Gates will much resemble the Cities of the Wolvin fleet, having three steel pole masts, with pilot house and texas adjoining forecabin, and raised quarter-deck over machinery and boiler space. The joiner

ily, three generations of which were present. The senior or Grandpa Gates and his better-half have been married for 57 years, and he was to the fore with his speech in excellent style. Mr. Robert Wallace, contrary to his usual custom and natural disposition, saw the error of his ways for once, and held the guests spell-bound for a while, with his flights of honest oratory. It was mentioned within the hearing of the writer, that the renowned Chauncey M. Depew would have to look to his laurels as an after dinner speaker if Mr. Robert Wallace persisted in giving such great pleasure to a select circle of his well-known friends. Among other speakers were Mr. and Mrs. John W. Gates, Mr. Gates, Jr., Col. Elwood, Mr. Edenborn, Mr. Wassman, Mr. Lambert, Mr. Drake, Mr. Cussard, Mr. Babcock, Capt. Wolvin, Mr. Keefe and others.

The American Ship Building Co. kindly placed a special electric car between Cleveland and Lorain, at the disposal of their guests, while the Chicago contingent arrived on the special car owned by Mr. Gates, managing owner of the new ship, and in honor of whom she has been named.

**A PASSAGE IS NOT A VOYAGE.**

In the case of Baxter et al. against the schooner Mary Adelaide Randall, which was decided for the defendant by Judge Townsend in the United States court at New Haven, over a year ago, an appeal was taken to the United States circuit court of appeals. The appeal was taken on a question of law as to the true meaning and intent of the word "voyage."



PROFILE AND DECK PLAN OF THE STEEL CARGO STEAMER JOHN W. GATES.

Built to the order of the American Steel and Wire Co., Chicago. The first of a fleet of four sister ships, 497 feet in length.

and in fact wherever it is possible wood work has been entirely dispensed with. Her "double" or "water bottom" six feet deep, divided into thirteen water-tight compartments, has a capacity for about 3,500 tons of ballast, and constructed as it is, with five longitudinal girders on each side of the center line, makes the vessel exceptionally strong longitudinally.

The 'tween deck beams are spaced eight feet apart throughout the length of the cargo holds, and consist of 15-inch heavy channels, attached to 25-inch channel belt frames similarly spaced, and these in connection with spar deck beams and channel floors make a succession of continuous heavy girder frames eight feet apart throughout the length of the ship. These in turn are strongly connected and braced longitudinally by stringers and girders, making the hull as a structure exceptionally strong.

There are fifteen cargo hatches 30 by 8 feet in the clear, spaced twenty-four foot centers. The cargo holds are divided into six compartments by water-tight bulkheads and steel doors, and this, apart from being a great element of strength and safety to the ship, will enable a cargo of several different kinds of grain or ore being carried without mixing.

Her motive power will consist of a quadruple-expansion engine built at the Cleveland shops of the American Ship Building Company, and having cylinders 16½ inches, 25½ inches, 38½ inches and 60 inches in diameter, with a common stroke of 40 inches. This will operate the main

work, furniture and fixtures will be of the latest and most elaborate style, the captain's and passenger accommodations being finished in paneled, quarter-sawn oak.

Mr. Robert Logan, naval architect and consulting engineer, Cleveland, personally superintended the construction. Mr. Joseph Hayes, expert marine engineer and superintendent of the line, represented her owners during the building of her machinery, etc. Capt. Ralph Lyons will take charge of the John W. Gates, and Mr. Haas, chief engineer. She will be ready for service on the opening of navigation.

After the new competitor for lake favors had been duly admired, etc., the launching party and invited guests, to the number of about one hundred, repaired to the spacious mold loft and partook of the hospitality of her builders in the form of an elegant light lunch, with which was doled out a sparkling and plentiful supply of the "elixir of life," also some of that darker colored condiment, and rightly or wrongly ycleped "the stuff that cheers and don't sophisticate," made from roasted berries, beloved by sailors. When the inner man had been made somewhat comfortable (there were ladies present also) Mr. W. L. Brown, Chicago, president of the American Ship Building Co., and the host of the occasion, after a few timely and pleasant remarks, called for a standing toast in honor of the fair godmother and official christener of the John W. Gates, which was heartily and duly liquidly responded to, after which Mr. Brown kept the floor occupied with excellent speakers, each of which eulogized the owners, builders, ship, and especially the Gates fam-

The decision of the higher court of appeals has been given out, and it is of the utmost interest to shippers and marine men generally. It is decided that the voyage of a vessel commences at the time she leaves port until she has arrived home again and her cargo is discharged. The plaintiff contended that the voyage was ended when the vessel arrived in port. This decision will have an important bearing on other similar cases now pending.

**WANTED DATA ON SHIPBUILDING INDUSTRY.**

The following worded circular letter has been sent out by Hon. Eugene F. Chamberlain, Commissioner of Navigation, Washington, D. C.

The House Committee on Merchant Marine and Fisheries in its consideration of the measure generally known as the "Shipping Bill", or "Subsidy Bill", has requested for its use as soon as practicable a statement from the Bureau showing:

- 1st. The shipbuilding establishments on the seaboard of the United States in which steel vessels are built.
- 2nd. The number of men employed in each establishment.
- 3rd. The capital invested.
- 4th. A list of the steel merchant vessels now being constructed at each establishment, showing gross tonnage, (speed if practicable), and for whom building.

The Bureau will be under obligations to you, if you can consistently furnish this information for your establishment.





ESTABLISHED 1878.

Published Every Thursday by

THE MARINE RECORD PUBLISHING CO.,  
Incorporated.C. E. RUSKIN, - - - - - Manager.  
CAPT. JOHN SWAINSON, - - - - - Editor.CLEVELAND, - - - - - CHICAGO,  
Western Reserve Building. - - - - - Royal Insurance Building.

## SUBSCRIPTION.

One Copy, one year, postage paid, - - - \$2.00  
One Copy, one year, to foreign countries, - - - \$3.00  
Invariably in advance.

## ADVERTISING.

Rates given on application.

All communications should be addressed to the Cleveland office,  
THE MARINE RECORD PUBLISHING CO.,  
Western Reserve Building, Cleveland, O.

Entered at Cleveland Postoffice as second-class mail matter.

CLEVELAND, O., JANUARY 25, 1900.

SO MANY lake vessel owners are bound across the Atlantic on their usual annual vacations that we may understand the balance has been struck on the proper side of the ledger. In other years, a couple of weeks at Old Point Comfort, or a month in Florida or California was considered a fair chance at relaxation, but with a good season in 1899, and a better one in view for 1900, a few spondoolicks won't be missed.

WE are pleased to take this means of thanking our numerous friends and patrons, also our exchanges, for their many pleasing congratulations on our issue of the 18th instant which contained the address of the president and Board of Managers of the Lake Carriers' Association as well as a full report of the proceedings of the annual meeting, incidentally, and at the same time, the RECORD doubled its ordinary size and volume in commemoration of its 22nd year of publication.

C. H. KREP, ESQ., Secretary of the Lake Carriers' Association, announced while in Detroit attending the annual meeting, that he had received several new applications for membership in the association this season. These accretions help to swell the total, and, from present indications, every ton of the better class of floating property will eventually be enrolled in the membership of the association. Individual, and, or, personal considerations, etc., excepted.

THE Weather Bureau has lost one of its most distinguished members in the death this week of Prof. Henry A. Hazen. The late professor was well known among meteorologists and scientific men. He was born in India fifty years ago. He was graduated from Dartmouth college and then was connected with the scientific department of Yale university for nine years. He joined the United States Signal Service, U. S. Army, in 1881 and remained with the Weather Bureau, now in the Department of Agriculture, ever since.

THERE seemed to be an inclination at the recent annual meeting of the Lake Carriers' Association to continue the president in office for another and a consecutive term, several members spoke in favor of such a revision of the clause in the by-laws, and the question remains open on the motion of Mr. Coulby, Cleveland, since the meeting of a year ago. The members present were fairly divided on the subject so that the two-thirds vote necessary to carry an amendment to the by-laws was not in evidence, and accordingly the motion was lost. The re-election of a past president was admitted as a probability in the future, but never for a consecutive term of office. It surprised quite a few to hear from the lips of a prominent member and earnest worker, that he would not officiate if nominated, his candor at least, must be admired.

## NAVAL TRAINING SHIPS.

In line with the U. S. S. Chesapeake, built expressly as a training ship for boys and green hands destined for service in the United States Navy, it is now on the tapis in several countries to establish training ships for youths desirous of serving in the mercantile marine.

A few years ago a parliamentary royal commission on British merchant shipping recommended the establishment of sea-going training ships as nurseries for lads entering the merchant service. It was suggested that such ships should be stationed at the principal sea-ports in the United Kingdom. The project, however, has not yet been taken advantage of, and this part of the commission's report remains a dead letter.

We now learn that the North German Lloyd Company intends to set up a training ship for cadets. This decision is regarded in Germany as of great importance, in view of the increasing scarcity of officers and seamen, and of the need of giving a sound training to those who are destined for a maritime career. A large sailing ship is to be procured, which will take voyages to different parts of the world as a training vessel.

The cadets will serve for one year as ship's boys, for a second as ordinary seamen, and for a third as able bodied seamen. It is proposed to accept twenty or thirty cadets every year, so that the number under instruction at any given time will vary from sixty to eighty. The training ship will be commanded by a captain of great experience, who will have under him, in addition to his crew of cadets, four officers, two teachers, a doctor, and a sufficient number of boat-swains, carpenters, seamen, cooks, etc. It is assumed that the cadets will already have received a good education, while on the training ship, in addition to navigation, they will be taught foreign languages and general knowledge. At the end of the three years' training on board the sailing ship, the cadets will be placed on board the steamships of the North German Lloyd, as either junior or warrant officers. It is intended to charge the sum of 600 marks per annum in return for the training, teaching, board and kit, which will be furnished by the company. It is also announced that a sailing ship was selected on the express ground that it was only on board such a vessel that the necessary qualities of courage, quick perception, and decision, with bodily agility, could be acquired.

THERE seems to be rather peculiar means used to inflate statistics of tonnage owned in the United States. For instance, we find that an official number has just been assigned to the canal boat Nutmeg, 141 tons, built in Schuylkill, Pa., in 1870 and now owned in New York. This craft is about aged enough to vote, she has evidently attained her majority, yet, it would appear that she has escaped being officially known for the period of thirty years. It is hardly a logical proceeding, for our statistical enumerators of national owned tonnage, to ignore all fractions up to 99-100, on the measurements of new vessels, and then to seek out almost antediluvian craft, of questionable seaworthiness, from five tons and upwards, to swell the grand annual aggregate. How many of such craft as the above mentioned are included in this year's tonnage list, we have not the patience or leisure to determine, but, a country that takes thirty years, more or less, to officially learn about, record and make known its domestic tonnage, is rather too slow for this age and generation. An act of Congress has made it mandatory to list all vessels of five tons and upwards, though it appears to have been much of a dead letter until the present energetic and generally well-advised Commissioner of Navigation "put his hand to the plow" and took charge of that department. That 2,614,869 tons of Atlantic and Gulf coast tonnage will soon become susceptible of revision and re-classification, if we are to have a fair, practical and half-comprehensive idea of what the actual tonnage consists of. Other geographical divisions likewise.

SENATOR HANNA is championing the cause of the postal clerks in service on the Detroit river. These men are out in all kinds of weather and take the same risk as life savers; they are therefore deserving of a trifle more recompense than the ordinary letter carrier and the junior senator from Ohio is going to see what he can do for them in this respect. The Lake Carriers' Association was asked to endorse an application for an increase of pay for the men in this service, but that body is inclined to be conservative in its endorsements, and not to go outside of its own particular functions.

THE amount of tonnage chartered by the British government in connection with the war in South Africa is almost incredible, and the Boers must be credited with being quite "a big toad in the puddle" after all. The lengthy lists of high-classed bottoms which the Imperial government has been obliged to charter, now exceeds, in the aggregate, 1,000,000 tons. According to the old-fashioned way of figuring up a paying charter, viz.: \$500 per 100 tons per month, this calls for an outlay of a neat \$5,000,000 for each month the charters are in existence, but a couple of million dollars more can probably be added for the transportation of troops, stores, etc., and vessels not under government charter, regular liners and miscellaneous supplies forwarded in connection with the war. As a matter of fact, some of the charters made by the British government were made at \$7 per ton per month. The suggestion occurs at this time, that if a million tons were withdrawn from the lake service, or say upwards of two-thirds of the total craft afloat, lake commerce would be about paralyzed, and, if all the vessels on the Pacific Coast, as well as the Western rivers, were taken under a time charter, the charterer would still lack nearly 200,000 tons of the million required, as evidenced in the transport service of the British government. Yet, such is the volume of the over-sea tonnage owned in the United Kingdom, that the Atlantic ferry, as well as a majority of other large steam lines, are in no wise inconvenienced in their regular sailings, and steamers in the general cargo carrying trade, or tramps, are not reaping a very rich harvest on account of receiving abnormally high freights, as they are still changing ports and seeking cargoes the world over; besides, chartering is so light, except in the River Plate and one or two other quarters, that the owners of tramp steamers must still charter at bare working rates, or lay their boats up for awhile. This condition, however, is a generally chronic one, but in war times, and with a million tons of vessel property taken out of the freight market for an indefinite time, ordinary cargo steamers ought to be wallowing in prosperity.

The shipbuilding and commerce of the lakes is phenomenal in number and volume, as compared with other divisions of the country. According to the last report of the Commissioner of Navigation for the fiscal year 1899, the lake tonnage, above 5 tons and upwards, documented 1,446,348 gross tons. The Pacific coast and Western rivers combined, figure up to 803,021 gross tons, so that the lake tonnage exceeds that of the Pacific coast, and the Western rivers by 643,327 gross tons, or, is 906,411 tons greater than that of the entire Pacific coast, and 1,183,264 gross tons more than that of the Western rivers, all of which is of course very gratifying to lake interests. However, "lest we forget" in the plenitude of our prosperity, what other maritime countries are doing, we quote the output of British shipyards for the year just closed, at 1,763,914 tons. We learn from these figures that there was launched last year from shipyards in the United Kingdom alone more tonnage than is owned, contained or afloat on the entire chain of lakes and Western rivers combined, and this too, by 54,482 tons in favor of the annual British output. Furthermore, if all the tonnage owned on the lakes and the Pacific coast was gathered together, it would only exceed the year's launching from British shipyards by about 222,000 tons, or less than the year's building on the river Wear, on the north-east coast of England. It is just as well that these figures should occasionally be given due publicity, not in derogation of the work of American shipyards, nor by any means as a kill joy, but just as a matter of correct official information on shipbuilding statistics, and, in a measure, so that we need not get our ideas unduly inflated during the preliminary stages of steel shipbuilding in the United States.

CONSIDERING the many prominent Weather Bureau stations now established on the lakes, it passeth understanding why Mr. James Berry, Chief of Climate and Crop Division, Washington, D. C., can't find space for more than a couple of lines in his usual weekly bulletin, to tell us about the ice conditions on the lakes, on the rivers and harbors. We gather from a table under date of the 22nd. instant that there was only a trace of ice in Grand Haven, Saginaw, Sheboygan, Green Bay, St. Ignace and Duluth. Buffalo catches 2 inches and Sandusky, the only Ohio port mentioned, is credited with 3 inches, this looks like an abnormally mild season for the above latitudes, but, perhaps the information is compiled more properly for the agricultural division and with a distinct relation to the condition of the crops, regarding which the ice on the lakes, and in the rivers and harbors has not the slightest influence or bearing.



NOT as a means of evading any clause in the Rush-Bagot agreement, but, rather on strictly technical grounds, we have maintained, that hulls ultimately intended for naval service could, in all fairness, be built at any lake port or shipyard as, until completed, or equipped, in a word, made ready for use, the, or, any steel structure built on the lakes and floated through the Canadian system of canals, was in point of official cognizance, a nonentity. A more rational way out of the existing difficulty, which prevents lake shipyards from competing with coast builders on naval contracts, thereby discriminating against one class of citizens in favor of a similar class differently located, has now been evolved by Congressman E. L. Hamilton who, if his contention is right, finds a way to build warships on Lake Michigan without abrogating the treaty or agreement between the United States and Great Britain. He has learned that the paragraph alluding to the building and maintaining of warships on the lakes does not include Lake Michigan, which he contends is an inland body of water entirely bounded by the United States, and he strengthens his holding by showing that in the treaty, the right of the subjects of Great Britain to sail Lake Michigan was especially stipulated, but under such laws and conditions as the states or the United States might make. This article is not mentioned at all in the warship clause and it looks to Congressman Hamilton as if the omission was intentional, and let Lake Michigan out entirely. The State Department is said to have taken the same view of the case, and if that department will stand back of the member from the Fourth Michigan, he will introduce a bill to facilitate the building of the smaller warships on that lake. It will mean much for Chicago and the Wisconsin ship yards, though it will not help the ship yards on Lakes Superior, Erie, Ontario or Huron.

THE persistent advocacy and contention of THE MARINE RECORD for the appointment of an international commission to preserve and conserve lake surface levels, has met with a full measure of success on this side of the border, and, as our neighbor, the Dominion of Canada, has been closely watching the discussion, that government will no doubt be in a position to appoint commissioners, instant. Senator Platt, of New York, introduced a joint resolution on Monday inviting the government of Great Britain to join the formation of an international commission to be composed of four members from each country to report up on the conditions and uses of the waters adjacent to the boundary line between the United States and Canada, including all the waters of the lakes and rivers whose waters flow by the St. Lawrence river to the Atlantic ocean and such other measures necessary to the diversion of such waters. The sum of \$20,000 is appropriated by the resolution to pay the commissioners' expenses. Now, let the Canadian government go and do likewise.

#### THE JENKS SHIP BUILDING COMPANY.

Notwithstanding the illness of Mr. W. S. Jenks, president of the Jenks Ship Building Company, work is being pushed rapidly on the two steel steamers which they are building to the order of Capt. Thomas Wilson, of Cleveland. The canal sized steamer is nearly closed in, and the company is now engaged in putting in the machinery. She will be 257 feet over all, 40 feet beam and 26½ feet depth of hold, with a 4-foot water bottom. She will have all modern improvements, including steam steerer, steam capstans and electric lights. The engines are 17½, 28 and 47, by 40 inches stroke, and two boilers, 11 by 12 feet, which will be allowed 180 pounds of steam. The other steamer, which will be equipped with all of the above modern improvements, will be 440 feet over all, 50 feet beam and 28 feet depth of hold, with a 5-foot water bottom. Her machinery will be 23, 38 and 63 by 40, and her three boilers 12½ by 12, allowed 180 pounds of steam. Her keel, center keelsons and garboards are in place; and work progressing nicely. She will be similar to the H. W. Oliver, launched last spring. There is a full complement of men at their machine shop where the engines are being constructed.

#### CARGO BOATS 730 FEET IN LENGTH.

A report comes from Seattle, Wash., to the effect that on a recent visit of J. J. Hill to that section of the country he gave out some of the particulars of his intended Pacific steamship route and the vessels that would carry his cargoes.

It is said that Mr. Hill took much interest in showing plans of two large cargo steamers which will be completed within the next eighteen months for the Oriental trade.

The dimensions of the steamers are said to be 730 feet long, 74 feet beam, 50 feet deep, the carrying capacity of each craft being 22,000 tons.

When these steamers shall have been completed they will be the largest the world has ever seen, exceeding the famous Oceanic which is 704 feet in length. Mr. Hill considers that these steamers will not only lead the world for a decade, but by their superior and economical arrangements the cost of carrying cargo across the Pacific will be reduced to such a point that there can be no competition on the coast. These steamers will be followed by two others within a year of the launching of the second. The cost of these floating warehouses will exceed \$2,500,000 each. Such is the report, but the RECORD by no means vouches for its authenticity, and we rather think that Mr. Hill would hardly start his Pacific fleet with boats of such abnormal dimensions.

#### ANOTHER OUTLET TO THE COAST.

Another route for forwarding Western produce to the Atlantic seaboard is being exploited by the Dominion Minister of Public Works. He states his intention to dredge and lock French river, which empties into the Georgian Bay a short distance north of Parry Sound, so that deep-water vessels can transfer cargo at a point where the Canadian Pacific Railway commences its right of way down the valley of the Ottawa river to Montreal.

It has been proposed for some time to make this route an all waterway, on which barges can be used through joining Lake Nipissing and the Ottawa river by a canal.

If Mr. Tarte carries out the government project of improving French river, the new route would be a feeder of long haul business to the Canadian Pacific Railway.

#### ENDORSES STEAMBOAT INSPECTORS.

The MARINE RECORD warmly endorses the Duluth steamboat inspectors, Messrs. Monaghan and Chalk, in reference to their decision in the case of the collision between the steamer Peerless and the schooner Stewart. The MARINE RECORD first observes that Supervising Inspector Sloan sustains the decision of the local inspectors, and then adds: It used to be a lower lake district that was the best administered, but now it seems as if the credit must be given to the head of the lakes. Local Steamboat Inspectors Monaghan and Chalk are able and efficient officers; they are also strict disciplinarians and excellent men to make a direct and correct rendition of the laws governing the movements of steamboats.—The News Tribune, Duluth, Minn.

#### RESOLUTIONS OF CONDOLENCE.

At a regular meeting of Huronia M. E. B. A. No. 43, held in Port Huron, the following resolutions of condolence and sympathy on the death of Peter Finney were adopted:

To the officers and members of Huronia M. E. B. A. No. 43, we, the undersigned committee, appointed to draw up resolutions of regret and condolence on the death of our brother, Peter Finney, who departed this life at Duluth, Minn., in April last, would respectfully submit the following:

Whereas, The dread messenger, death, has taken from us our late brother, Peter Finney, and bore away the soul of him who formed a link in our fraternal chain, it is meet and proper that we should give expression to his virtues and our sorrow at his loss.

Whereas, By the death of our brother our association has lost a consistent member, one who, when able to be with us, showed his devotion to the association. Therefore be it

Resolved, That we dedicate a page in our records to his memory; that we will cherish in our hearts his virtue and remember that our brother only obeyed the summons of our Heavenly Father, and is waiting for us on the other shore.

Resolved, That we extend to the bereaved relatives and friends of our deceased brother our heartfelt sympathy and condolence, and the affectionate remembrance in which he will be held.

Resolved, That a copy of these resolutions be presented to his relatives and the same be printed in the Port Huron Daily Times.

Resolved, That as a further mark of our respect that our charter be draped for the period of thirty days in memory of our beloved brother.

Committee { GEO. A. MILLER,  
GEO. H. BROWN,  
JAS. A. SOUTHGATE.

THE current number of the Tradesman is that Southern journal's 21st annual and the occasion is taken to thoroughly review the industrial progress of the South. Iron and steel industries are foremost among these and much valuable and inspiring information is presented. The number also contains a directory of the principal manufactories, coal mines, mills and hardware houses of the South.

#### NOTES.

PROF. BOYS, at the opening lecture of the Royal Institution London, on Jan. 9, announced that a torpedo boat destroyer fitted with a Parson's turbine engine reached a speed of 35½ knots.

IN speaking of the Hanna-Payne shipping bill, Mr. Clyde of the Clyde Steamship line, New York, said that his company, on the day the bill became a law, would sign a contract for the construction of two vessels, to cost in the aggregate about \$1,000,000. President Munson of the Munson Steamship line, had stated that his company would place at least 100,000 tons of shipping that was now under foreign flags under the American flag.

IN truth, the chief feature in the contemplated erection of elevators at Montreal is not so much that the scheme will entail an individual loss on each and every port from Maine to Georgia, for, under different circumstances, the loss sustained by one might be compensated by the gain of another, but that the collective loss suffered by Boston, New York, Philadelphia, Baltimore, Galveston and others will be the gain of Montreal; in other words, will constitute a national detriment to the advantage of a foreign neighbor.—Philadelphia Inquirer.

COMDR. RICHARDSON CLOVER, Chief Intelligence Officer of the Navy, will issue this week the annual publication of the Bureau of Naval Intelligence on naval progress. The book will be an unusually interesting one to the naval service. Comdr. Clover says in the introduction of the publication, that it "should have gone to press in July, but due to the pressure of work resultant from the late war with Spain and the lack of a sufficient detail of officers, until within the past two months, the preparation of this volume has been delayed and advantage has been taken of the delay to bring its information up to the date of publication."

THE Great Northern Railway of Canada, which has let the contract for an elevator at Quebec, is planned as a new Canadian transcontinental system. From Parry Sound to Quebec is 575 miles, all but 90 miles are practically completed. A steamship line operates between Parry Sound and Port Arthur. These points will ultimately be connected by rail. The western section of the proposed system, known as the Canada Northern, is being rapidly constructed. It will cross Northern Minnesota, then turn northward, traversing a section of British Columbia not now furnished with railroad facilities, and will have its Pacific terminus at Fort Simpson, 500 miles north of Vancouver, the Canadian Pacific terminus. About 300 miles of this division are completed and another section of 200 miles will be finished by the close of the year.

#### PORTAGE LAKE SHIP CANALS.

Commercial statistics of the traffic through the Portage Lake ship canals, Lake Superior, Mich., for the navigation season of 1899, has been compiled in the office of Major Clinton B. Sears, Corps of Engineers, U. S. A., Duluth, Minn.

According to a recapitulation of the detailed statistics it is found that the up-bound traffic was as follows, all figures given in net tons, 1,550 vessels of 912,959 tons, carrying 886,648 tons of freight and 17,123 passengers.

The down-bound traffic numbered 892 vessels of 403,663 tons, carrying 536,136 tons of cargo and 17,591 passengers.

The number of trips made by tugs, towing vessels, rafts, booms, etc., both up and down-bound, aggregated 1,489 passages.

The number of vessels bound up through the upper canal (Portage Lake ship canals) during the season of navigation numbered 816 steamers of 542,937 tons, and 472 sailing craft of 264,573 tons, making a total of 1,288 vessels, of 807,511 tons, and carrying 13,742 passengers.

The down-bound traffic was 451 steamers of 211,411 tons and 175 sail craft of 81,680 tons, or a total of 293,091 tons, carrying cargoes of 476,621 tons, and 13,032 passengers.

A comparison of commerce through the Portage Lake ship canals for the seasons of 1898 and 1899 shows a total of 3,909 vessels for the former year, 627 of which were sail craft; giving a total tonnage of 1,447,216, and 30,405 passengers. In 1899, 3,931 vessels, 701 of which were sailing craft and a total net registered tonnage of 1,367,883, carrying 34,714 passengers used the canals.

An estimate of the value of freight carried through the canals for the season of 1899 gives a total of \$54,994,844, the principal items of which were 72,320 tons of copper, valued \$24,588,800. Unclassified freight, 206,278 tons, having an estimated value of \$20,627,800. Coal, anthracite and bituminous 639,558 tons, of a total value of \$2,201,811, the anthracite, consisting of 46,805 tons, was valued at \$5.25 per ton and the bituminous at \$3.30 per ton. Flour, 343,633 barrels, at \$3.75 totalled \$1,288,624. Lumber, valued at \$3,310,275, and manufactured iron, \$1,669,260.

Much credit is due to the clerical exactitude of the U. S. Engineer's office at Duluth, in the compilation of this valuable detailed statement of commercial statistics.



## Chicago Nautical School

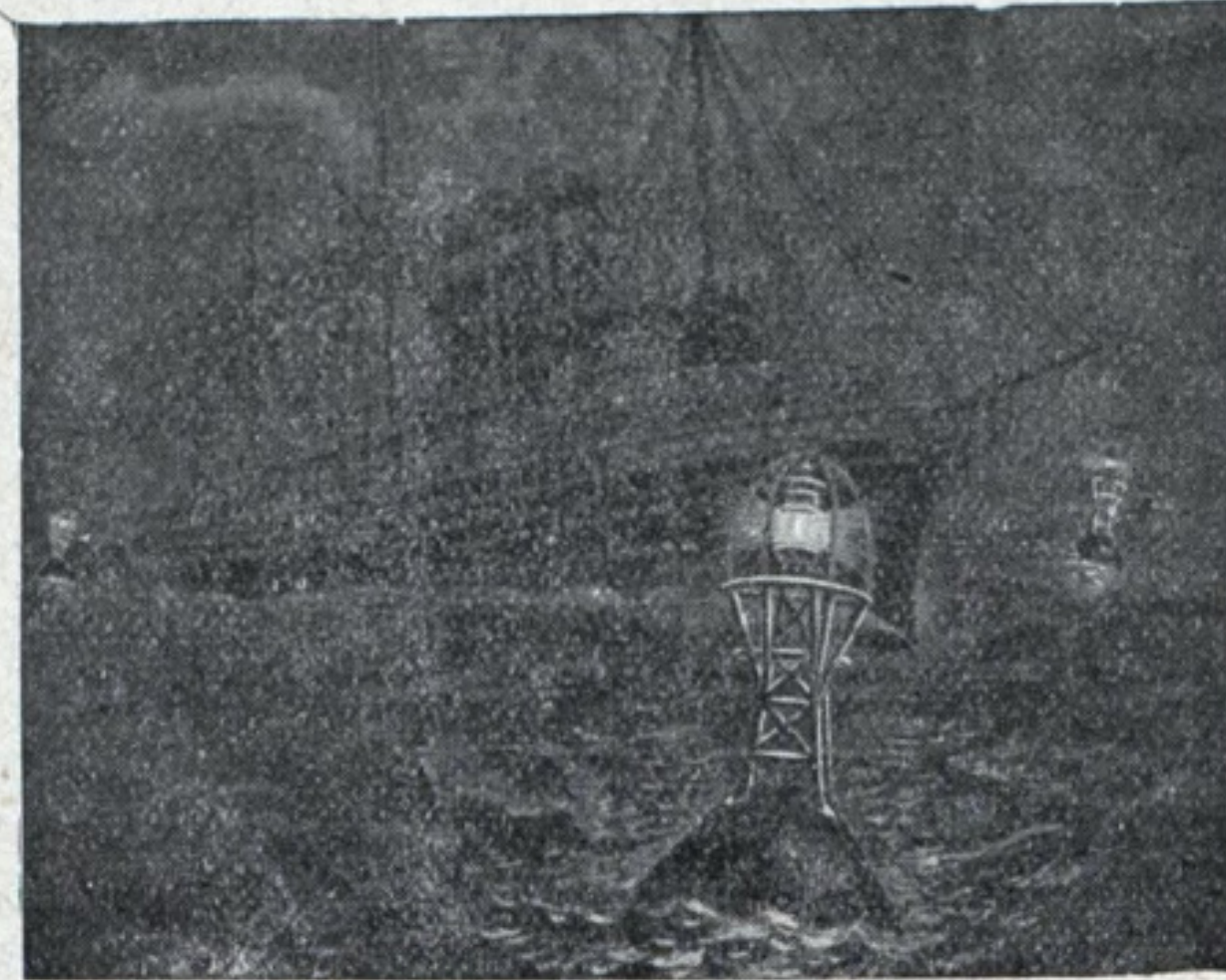
1513 Masonic Temple,  
CHICAGO.

W. J. WILSON,  
(Late Lieutenant U. S. Navy),  
Principal.

A full and complete course of instruction in lake and ocean navigation. Also special branches taught those desiring to qualify themselves for better positions in the marine service. \$200 in prizes (Great Lakes Register) awarded annually to students. Students taught by correspondence. Students may begin at any time. Send for circular.

## Pintsch Gas Lighted Buoys.

Adopted by the English, German, French, Russian, Italian, and United States Light-House Departments for channel and harbor lighting. Over 800 gas buoys and gas beacons in service.



### Burn Continuously

from 80 to 365 days and nights without attention, and can be seen a distance of six miles.

Controlled by

**THE SAFETY CAR HEATING  
AND LIGHTING CO.**

160 Broadway, New York City.

## Capt. Samuel W. Gould,

265 MARCY AVE., CLEVELAND.

Gives instructions in Ocean Navigation and prepares candidates for the examinations for Master and Pilots' Licenses, before the Local Steamboat Inspectors.

— TAKE —

Wade Park or Payne Ave. Car.

### LOCAL INSPECTORS TO LICENSE LOCAL PILOTS.

Mr. Daly, of New Jersey, has introduced the following bill in the House of Representatives, which was referred to the Committee on the Merchant Marine and Fisheries:

"A Bill Regulating Pilots.—Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that the government licensing, and controlling of all pilots throughout the United States, on bays, inlets, rivers, harbors, and ports of the United States, heretofore exercised by the various states, wherein such pilots may be, shall be placed solely in the United States Steamboat Inspection Service, and that the United States Revised Statutes as to the government of pilots, shall apply to all pilots now licensed by the various states; and all pilots heretofore licensed by authority of the laws of any state, shall be permitted to practice their profession as though they had been licensed by virtue of the laws of the United States."

All lake pilots are retained on shipboard as officers and fulfill the same duties as master, mate and second mates on the coasts and in the over-sea trade. These men are licensed by the local inspectors of any district, for each or every lake. A full branch pilot, or master, is considered eligible to take a steamer anywhere on fresh water at the time of the issuance of his license, and the document is thereafter perpetuated without further ado. In many instances, full branch lake pilots, known as masters, sail for a series of years or seasons on one route only, if, at the expiration of several years they are ordered to a port, or on a particular route which they have not sailed for half a lifetime, they usually seek the aid or assistance of a local pilot to conduct them safely through the rivers, Georgian Bay, or other less frequented localities. All sailing vessels can do as they please, as they are not under government jurisdiction, in so far as masters, mates or pilots are concerned.

There is something sinuously sinister in this measure of Mr. Daly's to nationalize local skill and talent. Is the United States Steamboat Inspection Service not loaded down already with its multifarious revisions of U. S. Revised Statutes? Does it desire, or is it aiming at having a board of pilot commissioners at each seaport? The present duties of local inspectors are, principally, to examine and license officers, and inspect the equipment of steamers, why, there-

fore, should they be called upon to watch the eccentricities of moving sand banks, the changing depths of water at harbor bars, or the natural sluicing out or silting up of any of the several channels at the entrance of a port, an officer can't be inspecting deck fittings, life boats, rafts, cork jackets with other appliances and be out taking soundings on the bars and in the channels, so as to be certain that another man is as well posted in local pilotage as he is or may be himself.

We may state at this writing that it is somewhat beyond our vision to sight "the nigger in the woodpile," but we feel morally and technically certain that he is there somewhere, although our conception or comprehension is now slightly at fault. It is good logic and sound common sense, to let the "shoemaker stick to his last," it is equally as pertinent to

### NOTES.

ON Dec. 16 the 31-knot Japanese torpedo boat destroyer Niji was launched, with steam up, from the English yard of Yarrow & Co., Ltd., in the presence of a large number of the Japanese naval authorities. On Dec. 18 a preliminary trial was made, when a speed was obtained of 31.206 knots.

THE Gas Engine & Power Co. and Seabury & Co., consolidated, of Morris Heights on the Harlem, have contracted to build for Geo. W. Weld, Boston, a steam launch 50 feet long and 7½ feet beam, to be presented to the Weld and Newell Clubs, of Harvard. She is to speed 18 miles per hour.

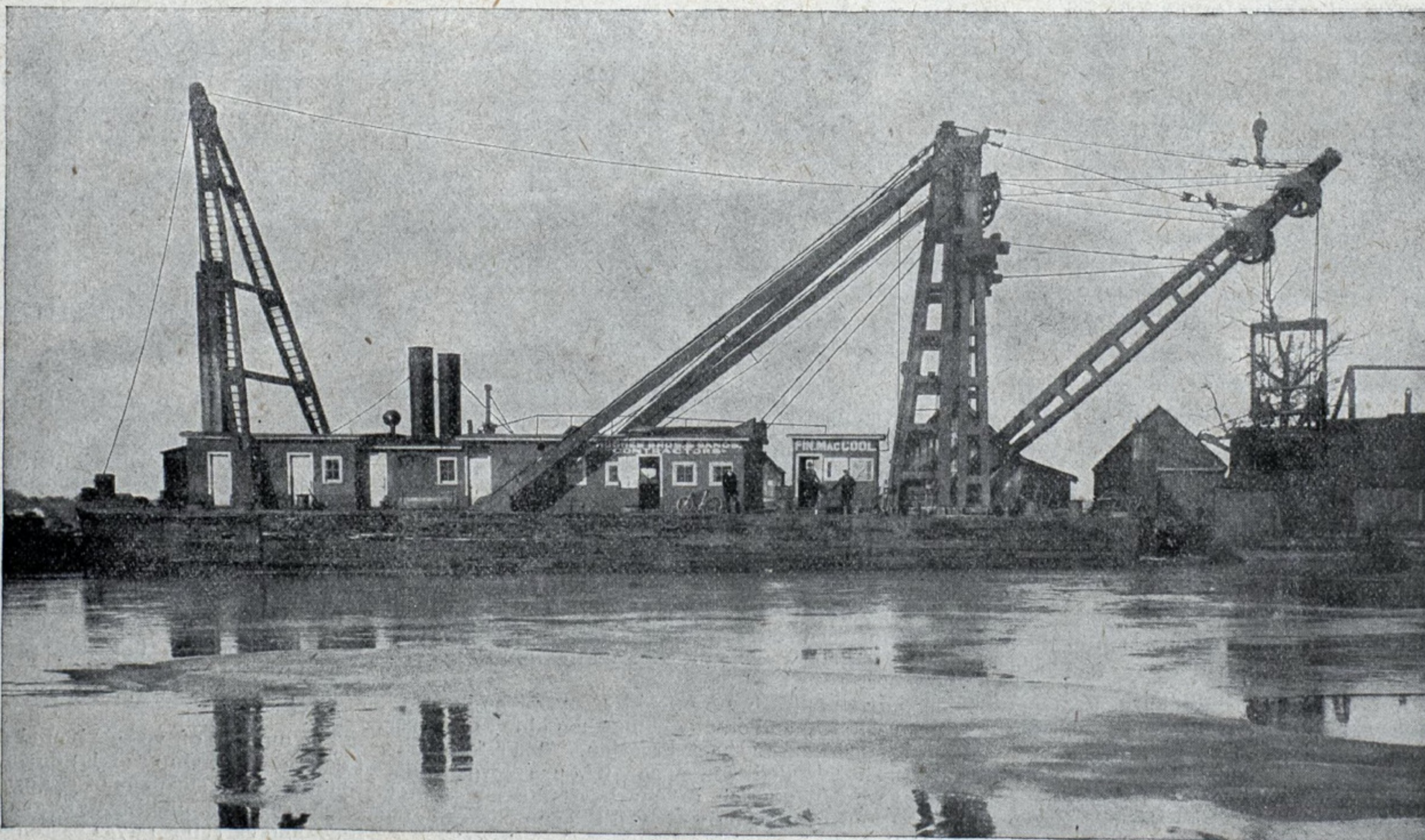
EARLY in February the first of two new cargo steamers will be launched from the yards of the Harlan & Hollingsworth Ship Building Co., Wilmington, Del., for the New York and Baltimore Transportation Co. The names of the two freighters are to be Chesapeake and Manhattan. They are to meet the requirements of the sea route from Baltimore to New York if needed.

A HISTORY of the manufacture of armor plate for the United States Navy, compiled by the American Iron and Steel Association and published under date of December 1, 1899, is magnificently illustrated by 37 full page engravings, showing places, processes, product and tests and is a pretty full review of congressional legislation relating to the price of armor for the United States naval vessels.

DURING the year 1899 there were launched from the ship-building yards of the United Kingdom 825 steamers

and 303 sailing vessels, aggregating 1,731,543 tons, as against 1,661,252 tons in 1898, 1,122,824 tons in 1897, 1,391,249 tons in 1896, 1,154,018 tons in 1895, and 1,124,000 in 1894. The proportion of these vessels launched on the Clyde last year was 243 steamers of 491,074 tons and 41 sailing vessels of 14,618 tons. The next most productive district was the Tyne with 120 steamers of 307,157 tons and one sailing vessel of 794 tons.

ACCORDING to the Weather Bureau statistics, any ten consecutive years selected at random will average in temperature with any other ten years, similarly taken and compared. Hence it is inferred that the chances are there will be enough frigidty coming along in these latitudes to even up for the mild winter experienced up to the present.



DREDGE, "FIN MA COOL."

This dredge is owned by Messrs. Hughes Bros. & Bangs of New York. She is entirely of steel and was built especially for use on their contract for the improvement of Buffalo Harbor. She has about 700 horse power of Roberts Boilers and her main engines have a pair of 18½" x 24" cylinders. The boilers furnish ample steam for these engines and the auxiliary engines. She was built in 1896. At present (January, 1900), The Roberts Safety improvement of New York Harbor.

ask a department of the Federal Government to keep its hands off purely local affairs. From Pensacola bar to Boston narrows, on the east coast, from the Golden Gate to Tacoma on the west coast, local pilots have been and are depended upon to do their full duty, they have done it, are doing it, and will continue so to do without being overborne and weighted down under the ægis of U. S. Revised Statutes.

The question is, who framed the bill, and with what intent and purpose? Why has Mr. Daly, in particular, fath-ered or become sponsor for such a ridiculous and iniquitous a measure. Perhaps the Committee on Merchant Marine and Fisheries will elucidate the whyness of the wherefore.



## OFFICERS OF STEAM VESSELS.

Congressman Minor, Sturgeon Bay, Wis., was made rather a cats-paw of a few days ago, as the following from the Congressional Record clearly indicates.

Mr. Minor. Mr. Speaker, I am directed by the committee on Merchant Marine and Fisheries to ask unanimous consent for the present consideration of the bill (H. R. 1040), to amend section 4445 to Title XII of the Revised Statutes of the United States, relating to the licensing of the officers of steam vessels.

The Speaker. The gentlemen from Wisconsin asks unanimous consent for the present consideration of a bill which the Clerk will report.

The bill was read as follows:

Be it enacted, etc., That section 4445 of Title LII of the Revised Statutes be, and is hereby, amended by adding thereto the following paragraphs:

"Every applicant for license as either master, mate, pilot, or engineer under the provisions of this title shall make and subscribe to an oath or affirmation, before one of the inspectors referred to in this title, to the truth of all the statements set forth in his application for such license.

"Any person who shall make or subscribe to any oath or affirmation authorized in this title and knowing the same to be false shall be deemed guilty of perjury.

"Every licensed master, mate, pilot, or engineer who shall change, by addition, interpolation, or erasure of any kind, any certificate or license issued by any inspector or inspectors referred to in this title shall, for every such offense, upon conviction, be punished by a fine of not more than \$500 and by imprisonment at hard labor for a term not exceeding three years."

SEC. 2. That this act shall take effect immediately.

The Speaker. Is there objection to the present consideration of the bill.

Mr. Richardson. Mr. Speaker, we should like to have some explanation of the necessity for taking this bill up out of order. Why can not it wait its regular course?

Mr. Minor. Mr. Speaker, this is unanimously reported from the Committee on Merchant Marine and Fisheries. The object sought is to correct an evil and a defect in the law as applied to those officers who must obtain licenses, like captains, mates, and engineers. The Treasury Department, under the provisions of existing law, provide a blank for each applicant to fill out and state therein his experience in his own particular line of duty. It has been found that a great many applicants for licenses fill out these blanks with false statements, claiming to have had a number of years' experience, when the truth is that no such experience has been had. We are unable at present to reach the offenders, for the reason that the inspectors of steamships have never been vested with the power to administer that kind of an oath.

Now, we desire to invest the inspectors with that power and then to punish the violators of that law, because, as the gentlemen from Tennessee will understand, the value of the services of these applicants for licenses depends largely on the experience of the man applying for them. If a man has not had the experience that is set forth in his application, then he ought not be licensed and can not be, under the law.

Mr. Wheeler of Kentucky. This provision is applicable to the rivers of the United States as well as to other navigable waters, is it not?

Mr. Minor. So far as pilots and engineers are licensed by the Federal Government.

Mr. Wheeler of Kentucky. Now, does not the gentlemen think the penalty prescribed for misstating the facts in regard to one's experience is somewhat severe? Permit me to call your attention to the fact that on some of the rivers of the United States it requires no very high degree of intelligence to act as pilot or engineer. On some of the rivers of the country men are accustomed to ply those rivers with

limited experience as pilots and engineers in charge of very small craft: and to prescribe a maximum penalty of three years in prison and a maximum fine of \$500 is a little severe. I happen to know something about that class of citizens, living in a large river district, and I do not think you ought to send a man to the penitentiary for a mere misstatement of facts. It occurs to me that the penalty is too severe.

Mr. Minor. The penalty ought to be severe. But in reply to your question, I would say this, that in my judgment it is a grave offense for an applicant of this license, for the purpose of procuring such a license, to go before the inspector of steamboats, and make an affidavit to a complete falsehood, and then, securing the license, and his employer having confidence in his ability, which confidence is based upon his statement of experience, puts in his charge hundreds of precious lives that go down on the rivers as well as on the lakes.

Mr. Wheeler of Kentucky. Just a moment, if you please. Does not the gentlemen understand that often small craft, tugs and boats with a very small amount of steam pressure, do not require men of much ability as pilots and engineers, who will not be permitted to have a license if they carry passengers at all, and they may ply up one of these small rivers only 50 or 75 miles, and have very few passengers?

Mr. Hull. If he only plies a short distance, would he need a license at all?

Mr. Wheeler of Kentucky. Every man has to have a license to carry passengers at all; and I will say to the gentlemen, if he lives in a district where there are large rivers, he knows that there are hundreds of little craft plying short distances and do not carry more than 50 passengers a year.

Mr. Minor. I would say that I have no doubt that the punishment would be imposed in accordance with the gravity of the offense.

Mr. Wheeler of Kentucky. I have practiced too much before Federal Courts not to know what granting such power means.

Mr. Minor. It has come to the attention of the Inspector-General, whose letter I have, that there are many such cases, and he condemns them and recommends the passage of this bill.

Mr. Wheeler of Kentucky. I believe in the merits of the bill, but the penalty is too severe.

Mr. Minor. The Law Department of this Government recommends it. There is absolutely no opposition to this bill from one end of the United States to the other. In my judgment, it ought to pass.

The Speaker. Is there objection to the present consideration of the bill?

Mr. Wheeler of Kentucky. I object, unless the gentleman will consent to an amendment reducing the penalty.

The Speaker. Objection is made.

In our opinion Mr. Minor was quite wrong in stating that "there was absolutely no opposition to the bill, from one end of the United States to the other." Of course the proceeding has often been mooted, and local inspectors of steamboats jealously desired to usurp, or be given the authority, etc., of a notary public, but the measure has not been brought to the notice of licensed officers, therefore, we consider Mr. Minor's assertion about there being no opposition to the bill as a very negative assumption, and it is just as well that an objection was raised so as to quash the ludicrous legislation.

It would be well if Mr. Minor and others who lack information on the subject of licensing officers for service in the U. S. mercantile marine, would bear in mind that officers are only certificated on their merits, after a voluntary competitive examination, there is no compulsion used or needed

to make any man a licensed officer, service, or servitude, technical skill and general ability is of course mandatory and must be provided by any one seeking a license.

When an applicant for a license appears before the board of examiners, which in this case is the local inspectors of steamboats, he has previously lodged testimonials of character and servitude, so that his voluntary examination simply hinges upon his technical ability, and in the case of engineers, mechanical knowledge and practical skill, physical qualifications, etc.; and these being determined, as and by the result of his examination, he either passes or is rejected, secures the license or gets plucked as an incompetent, not on the say so of his individual affidavit, but for lack of knowledge, skill, and, or, ability, and not at all as Mr. Minor would have us believe, because the candidate had made a false statement. An affidavit does not secure the license, nor should a stack of them as high as the clouds do so, unless the candidate was technically qualified. Mr. Minor ought to have known better than to have allowed his lips to enunciate such unjust aspersion, on the U. S. local inspectors of steamboats, as well as the licensed officers now in service, when he stated "that in his judgment it is a grave offense for an applicant for this license, for the purpose of procuring such a license, to go before the inspectors of steamboats and make an affidavit to a complete falsehood, and then securing the license, and his employer having confidence in his ability, puts in his charge hundreds of precious lives that go down on the rivers as well as the lakes." We call upon Mr. Minor to show even one such case as he speaks of, either within his own Lake Michigan district, or in any district on the Great Lakes.

The Committee on Merchant Marine and Fisheries evidently depended upon the verdant naivete of the Wisconsin Congressman to innocently glide the uncalled for measure through the House, trusting to his appreciable ignorance, or lack of information on the subject, should the clause be questioned by any of his colleagues.

The MARINE RECORD is pleased to inform Edward S. Minor, M. C., Wisconsin, a member of the Standing Committee of the House of Representatives on the Merchant Marine and Fisheries, that the licensed officers of the United States mercantile marine do not receive their certificates of competency by virtue of an oath, affirmation or affidavit, but rather after a technical and voluntary competitive examination.

PROF. W. F. DURAND, of Cornell University, has received the first prize for the best technical essay submitted to the American Society of Naval Engineers on "Electrical Propulsion for Torpedo Boats." The prize consists of a special compensation, a gold medal and life membership in the society. D. C. Ball, late of the Engineer Corps, was awarded second prize for his paper on "Interior Diagrams for Multiple Expansion Engines."

THE new life-saving station at Grand Marais, Mich., is completed and will soon be turned over to the government by the contractor. The station is the most modern one on the south shore of Lake Superior and cost \$5,000.

# S. F. HODGE & CO.

MARINE ENGINES,  
PROPELLER WHEELS,  
DECK HOISTERS,  
MARINE REPAIRS.  
312 ATWATER STREET,  
DETROIT, MICH.

## Chas. E. & W. F. Peck,

58 William Street, New York City.

Royal Insurance Building, Chicago, Ill.

C. T. BOWRING & CO.

5 and 6 Billiter Avenue, E. C., - London, England.



## Insurance

BROWN & CO., - - - 202 Main Street, Buffalo, N. Y.  
PARKER & MILLEN, 15 Atwater Street, W., Detroit, Mich.  
J. G. KEITH & CO., - 138 Rialto Building, Chicago, Ill.  
LA SALLE & CO., Board of Trade Building, Duluth, Minn.

Are prepared to make rates on all classes of Marine Insurance on the Great Lakes, both CARGOES AND HULLS.

## The Salvage Association of North America.

INCORPORATED 1899.

AN ASSOCIATION FOR THE PROTECTION OF UNDERWRITERS' INTERESTS AS REGARDS WRECKED AND DAMAGED PROPERTY AT SEA.



Application for the services of surveyors of this Association may be made to either the Chicago or New York offices.

Chicago Office,  
ROYAL INSURANCE BLDG.

New York Office,  
MUTUAL LIFE INS. CO. BLDG.



## Prominent Fueling Firms==Docks and Lighters.



### Steamboat Fuel at Chicago.

YOUGHIOGHENY and  
LEHIGH COAL CO.

J. T. CONNERY, Manager. ARCHIE J. HITCHCOCK, Dock Supt.

MAIN OFFICE: 1238-1242 Chicago Stock Exchange Building.

Long Distance Telephone, Main 5049. 110 LA SALLE STREET.

**FUEL DOCKS:** No. 1, Michigan Slip and Basin. 'Phone 3046, Main.

**FUEL LIGHTER:** No. 2, N. Halstead St. Bridge. 'Phone 773, North.

Equipped with 125 2-ton Buckets for Fueling anywhere in Harbor

WE PRODUCE OUR YOUGHIOGHENY COAL, AND GUARANTEE QUALITY.



### Steamboat Fuel at Cleveland.

THE PITTSBURGH &  
CHICAGO GAS COAL CO.

J. A. DONALDSON, Manager. N. J. BOYLAN, Fuel Manager.

OFFICE: 420-421 PERRY-PAYNE BUILDING.

TELEPHONE, MAIN 1888.

**FUEL DOCKS:** No. 1, River Bed, through Valley R. R. Bridge. } Telephone, West 190.

**FUEL LIGHTER:** No. 2, Main River, Foot of West River Street. } 300 Tons Capacity; Fuel Anywhere in the Harbor.

## PICKANDS, MATHER & Co.

PIG IRON.  
IRON ORE AND COAL.

**FUEL LIGHTERS**

AT BUFFALO,  
ERIE,  
ASHTABULA,  
AND CLEVELAND.

At DETOUR, MICH., A FUEL DOCK equipped with  
Shute capacity of 600 Tons.

Best Quality PITTSBURGH COAL furnished at any  
time during Day or Night.

WESTERN RESERVE BUILDING, CLEVELAND, O.

## M. A. HANNA & Co.

COAL, IRON ORE AND PIG IRON.

### Steamboat Fuel at Ashtabula.

Large Supplies of Best Quality.

Fuel scow with elevators and discharging  
spouts. Storage of 650 tons. Discharges  
150 tons an hour into steamers while  
unloading cargo.

**LIGHTER**

carrying different grades  
at all times.

MINERS AND SHIPPERS.

MAIN OFFICE, Perry-Payne Bldg., Cleveland, O.

## THE W. L. SCOTT COMPANY,

ERIE, PA.

WHOLESALE DEALER IN

Shamokin-Wilkes Barre ANTHRACITE.

Youghiogheny, Mansfield, PITTSBURGH.

Vessel Fueling a Specialty

by steam lighter or car dump,  
at all hours. Electric light.

# ...Coals

MAIN OFFICE: SCOTT BLOCK. LONG DISTANCE 'PHONE 440.

FUELING OFFICE: CANAL DOCK. LONG DISTANCE 'PHONE 320.

## Youghiogheny River Coal Co.

MINER AND SHIPPER OF

# OCEAN MINE COAL.

YOUGHIOGHENY  
GAS AND STEAM

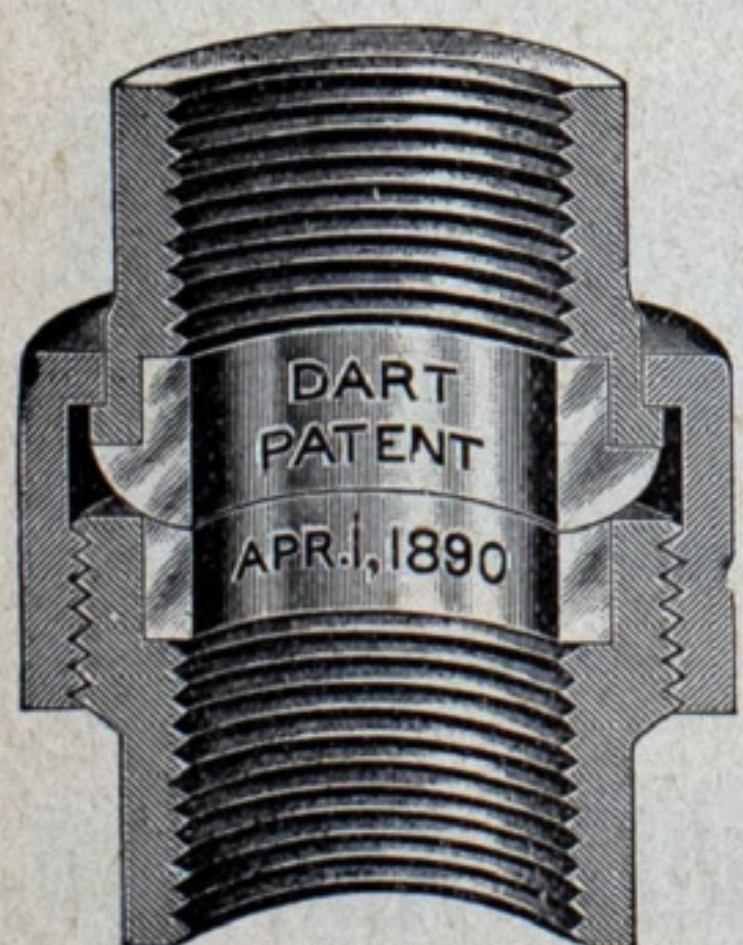
General Office:  
Erie, Pa. Long Distance 'Phone 409.

Shipping Docks:  
Ashtabula, O. Long Distance 'Phone 76.

**VESSELS FUELED AT ALL HOURS**

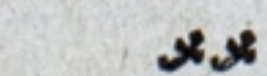
ELECTRIC LIGHT.

WITH OCEAN COAL ONLY,  
BY STEAM LIGHTER OR CAR DUMP



The  
Best  
Union

Made in the U. S.



Mnf'd by the  
E. M. Dart  
Mfg. Co.

Providence R. I.  
Send for circulars  
and prices.



## MARINE REPAIRING AT MANITOWOC, WIS.

The Goodrich Transportation Co. are prepared to do all kinds of Repair Work to Machinery,  
Also Joiner Work.

Goodrich Transportation Company's Repair Shops  
include complete Carpenter and Joiner Shop.  
New Modern Machine Shop. Blacksmith Shop,  
including Steam Hammer, Punch and Shears,  
etc., Brass Foundry.

Repair Shops are adjacent to Dry Dock and are  
equipped with best Modern Machinery. Porta-  
ble Electric Drills, etc., complete Electric Power  
Plant for supplying motors on board ships, and  
lighting. Night work a specialty. All work in  
charge of experienced and skilled mechanics.  
Charges moderate. Twenty-one feet of water  
alongside of shops.

### The Nickel Plate Road

is the peoples' route and the road that gives  
best service at the lowest rates. A Peerless  
Trio of thru express trains daily, palace  
sleeping cars, unexcelled dining car service,  
elegant equipment, these are the synonyms  
of the Nickel Plate's success. No. 8-5

### PRACTICAL MECHANICS.

Applied to the requirements  
of the sailor. By Thos. Mc-  
Kenzie. Illustrated; 12 mo.;  
cloth, \$1.50, by mail prepaid.  
The Marine Record, Western  
Reserve Bldg., Cleveland, O.

## Know Your Own Ship

is a book valuable to the Vessel Owner, Mas-  
ter, Naval Architect, and, in fact, all inter-  
ested in vessel handling and construction.

A simple explanation of the stability, con-  
struction, tonnage and freeboard of ships.  
Specially arranged for the use of ships' offi-  
cers, superintendents, draughtsmen and  
others. By Thomas Walton, naval architect;  
lecturer to ships' officers, government naviga-  
tion school. Fourth edition greatly en-  
larged. Illustrated; cloth, \$2.50, by express  
prepaid.

THE MARINE RECORD,

Third Floor, Western Reserve Building,  
Cleveland.

### The Prime Factor

of the success of any Railroad consists sim-  
ply in catering fully and generously to the  
public demands. This is what has brought  
the Nickel Plate Road to the front in railway  
matters despite formidable competition. As  
a thru route between the West and East it is  
the favorite with the traveling public. Fine  
trains, unexcelled service and low rates; a  
peerless trio of advantages. No. 6-5

## PATENTS

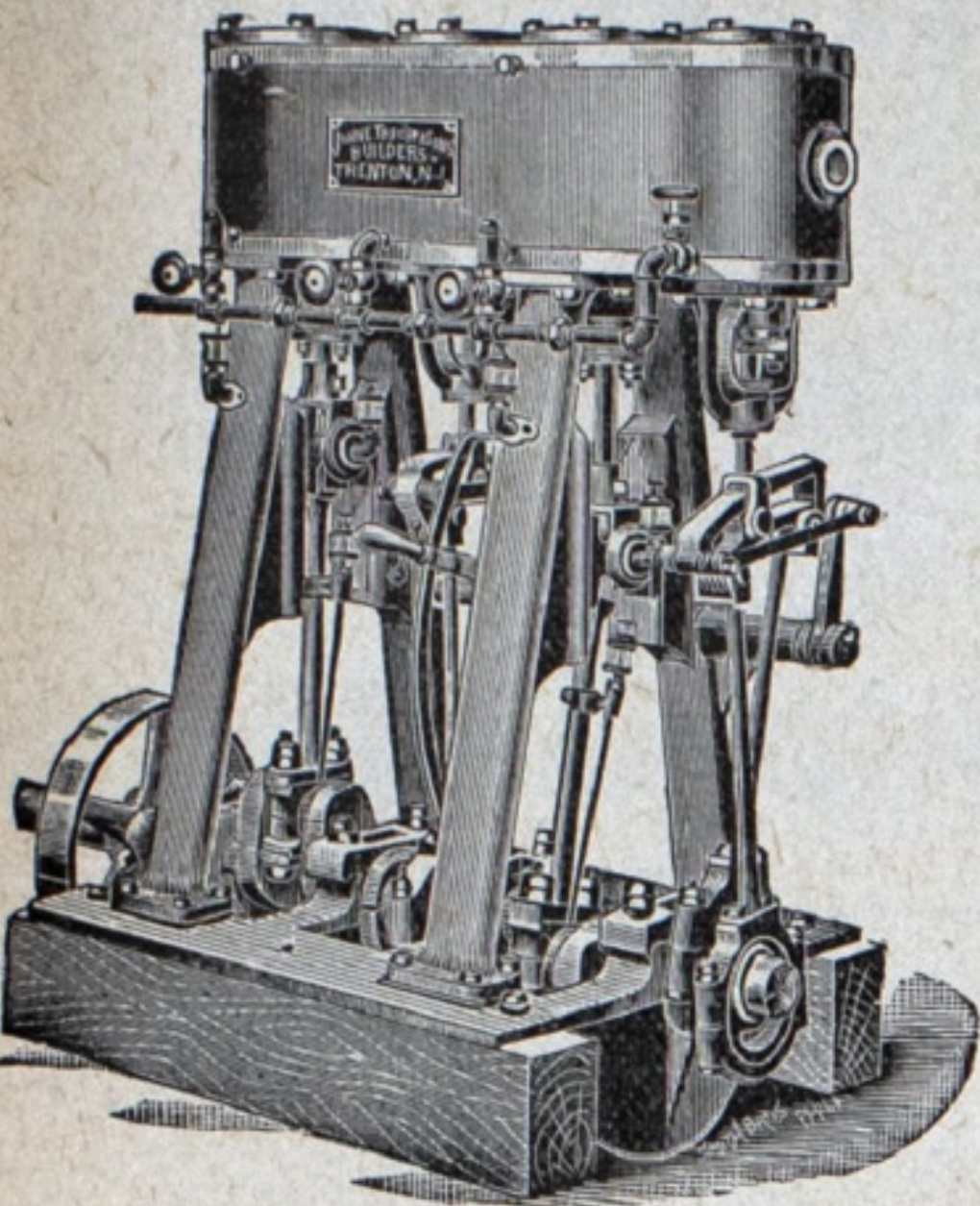
Procured on Inventions  
and Designs. Labels,  
Prints and Trade Marks  
Registered.

Sixteen Years' Experience.

R. W. BISHOP, - Washington, D. C.



John E. Thropp & Sons' Co.



BUILDERS OF  
Compound and Triple Expansion  
**ENGINES,**

Boilers, Surface Condensers, Propeller  
Wheels, Etc.

Contracts taken for yachts and tugs  
complete. Send for photographs of En-  
gines and descriptive pamphlet.

Works on Delaware & Raritan Canal Basin.  
**TRENTON, N. J.**

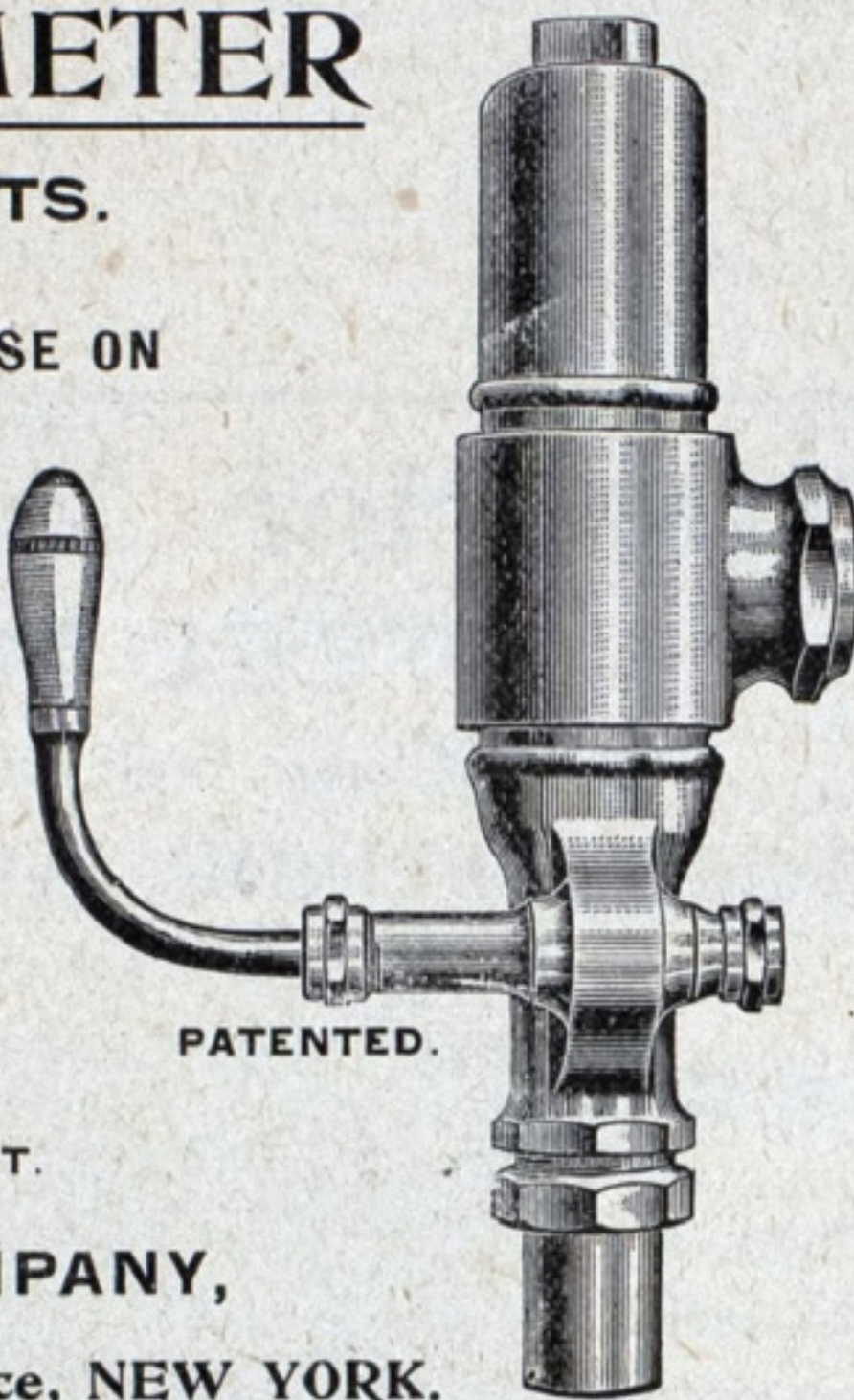
The **KENNEY FLUSHOMETER**

**FOR FLUSHING WATER CLOSETS.**  
No Cup Leathers or Springs.  
**THE BEST SYSTEM EVER INVENTED FOR USE ON  
STEAM VESSELS.**

Owners and constructors of Steamships, Yachts and  
Steamboats have found it indispensable. Used by  
the U. S. War and Navy Departments. Transports  
Grant, Sheridan, Burnside, Ter-  
ry, Hooker, Thomas, Sedge-  
wick, Meade, McClellan, Sher-  
man, Crook. Also Albany Day  
Line Steamers and others.



Showing application of  
Flushometer.



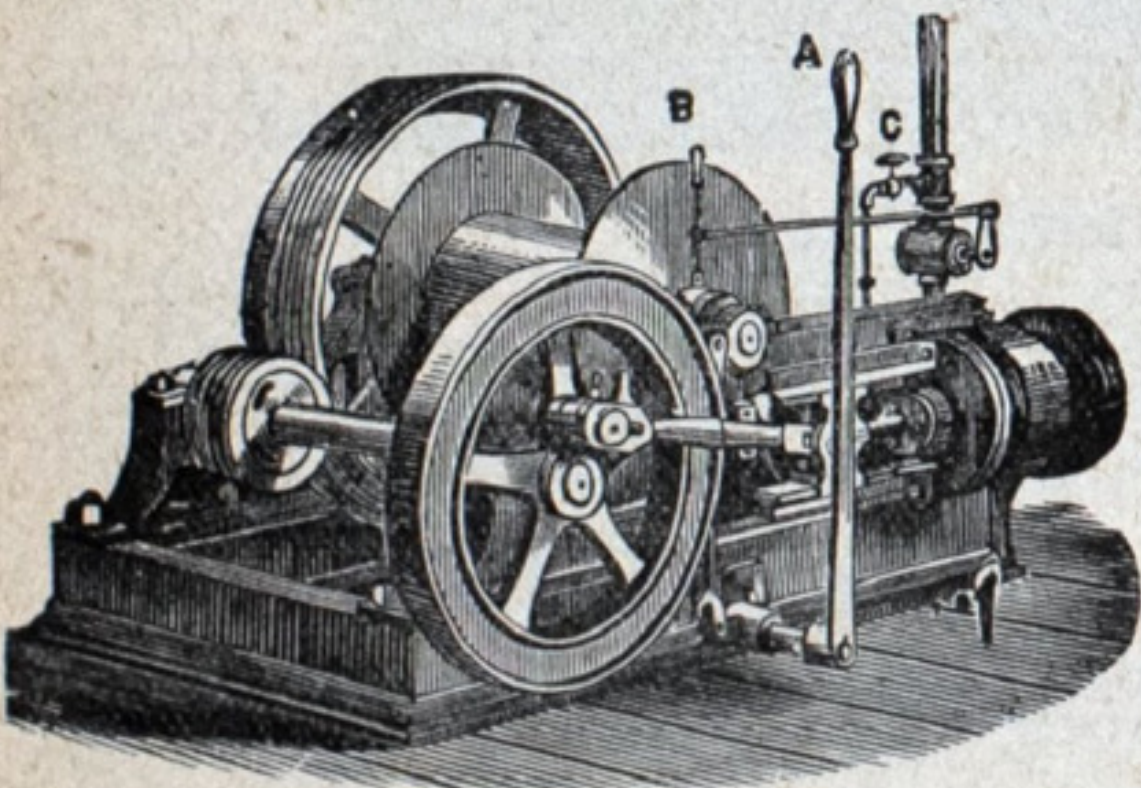
PATENTED.

SEND FOR ILLUSTRATED PAMPHLET.

**THE KENNEY COMPANY,**  
72-74 Trinity Place, NEW YORK.

**WILLIAMSON BROS.**

COR. RICHMOND AND YORK STS.,  
Philadelphia, Pa.



**HOISTING and SHIP ENGINES  
STEERING ENGINES.**

With either Fractional, Spur or Worm Gear of  
Various Patterns to Suit all Purposes.

**Compasses Adjusted**

For deviation, and deviation  
tables supplied. Great facilities  
for doing the work by day or  
night.

**John Maurice.**

Office, 24-26 Market St., CHICAGO.  
Residence, 1213 Albany Avenue.

**Scott's Coast Pilot for the Lakes.**

Price, \$1.50.  
For Sale by  
**THE MARINE RECORD,**  
Western Reserve Building, Cleveland.

JOHN DONNELLY, SR., PRES.  
JOHN DONNELLY, JR., VICE PRES.

H. B. FOLGER, TREAS.  
THOS. DONNELLY, Sec'y.

**THE DONNELLY SALVAGE  
AND WRECKING CO., Ltd.**

KINGSTON, ONT.

**EXPERIENCED DIVERS, TUGS, STEAM PUMPS, ETC.,  
SUPPLIED ON SHORTEST NOTICE.**

**NEVERSINK CORK JACKET AND LIFE BELT.**

Warranted 24 lb. Buoyancy and full Weight of Cork, as required by U. S. Inspectors. **Consolidated Cork  
Life Preservers.** Superior to all others. **Rings Buoys and Fenders.** SAFEST CHEAPEST.  
Approved and adopted by U. S. Board of Supervising Inspectors.  
Also adopted by the principal Ocean, Lake and River Steamer Lines as  
the only Reliable Life Preserver. Vessels and trade supplied. Send for  
Catalogue.  
Awarded four medals by World's Columbian Exposition.



**METALLIC  
and  
WOODEN  
LIFE  
BOATS.**



**Metallic Life Rafts, Marine Drags.**

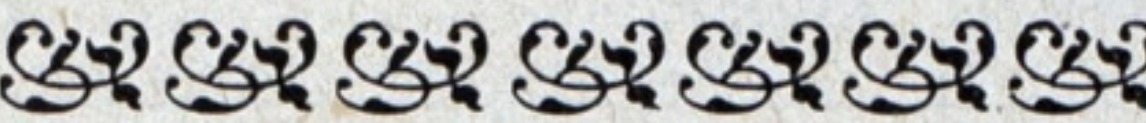
Manufacturer of Woolsey's Patent Life Buoy, which is the lightest,  
cheapest and most compact Life Raft known. Send for illustrated cata-  
logue. Get our prices before buying elsewhere.

**D. KAHNWEILER'S SONS, 437 Pearl St., New York City.**



**Ship Yard  
for Sale.**

The well-known yard and dry dock at New  
Baltimore, New York, fifteen miles below  
Albany. Has one large marine railway,  
steam saw and planing mill, timber slip,  
mould loft and all necessary facilities for the  
business; plenty of room for sliding off  
either side of dry dock for repairs or build-  
ing new vessels; has a water front of 500  
feet, with docks and buildings in good re-  
pair; well equipped and good facilities for  
getting timber by water or rail. This yard  
has done a prosperous business for many  
years. All in first-class order. Good rea-  
sons for selling. Terms easy. A good  
opportunity for the right party. For full  
particulars and terms address the owner,  
Wm. H. Baldwin, New Baltimore, Greene  
County, N. Y. 47-8



**SHERIFFS MFG. CO.**

ESTABLISHED 1854.

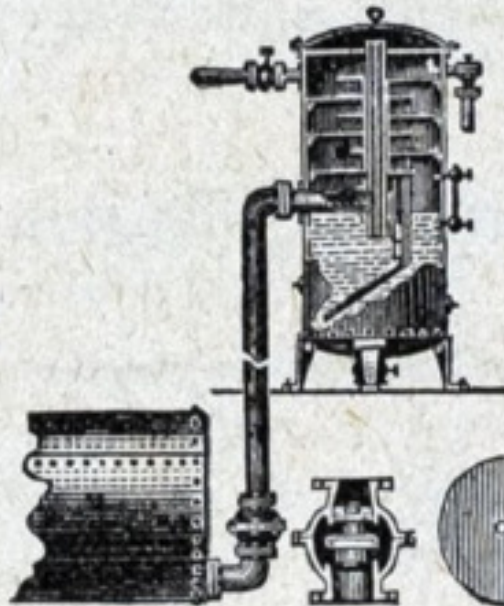


**MILWAUKEE, WIS.**

**THE CHASE MACHINE COMPANY,  
ENGINEERS AND MACHINISTS.**

MANUFACTURERS, UNDER THE CHASE PATENTS, OF  
Fog Whistle Machines, Hoisting Engines, Steering Engines Automatic Towing Engines,  
Power and Drop Hammers, and other Machinery. Engineers' Supplies and General Jobbing.

111 ELM STREET. TELEPHONE, MAIN 994. CLEVELAND, O.



**Buffalo Feed Water Heater  
AND PURIFIER.**

Made in all Sizes and to Suit all Conditions.

**ROBERT LEARMONTH,**  
200 Bouck Ave., BUFFALO, N. Y.

Send for Catalogue.



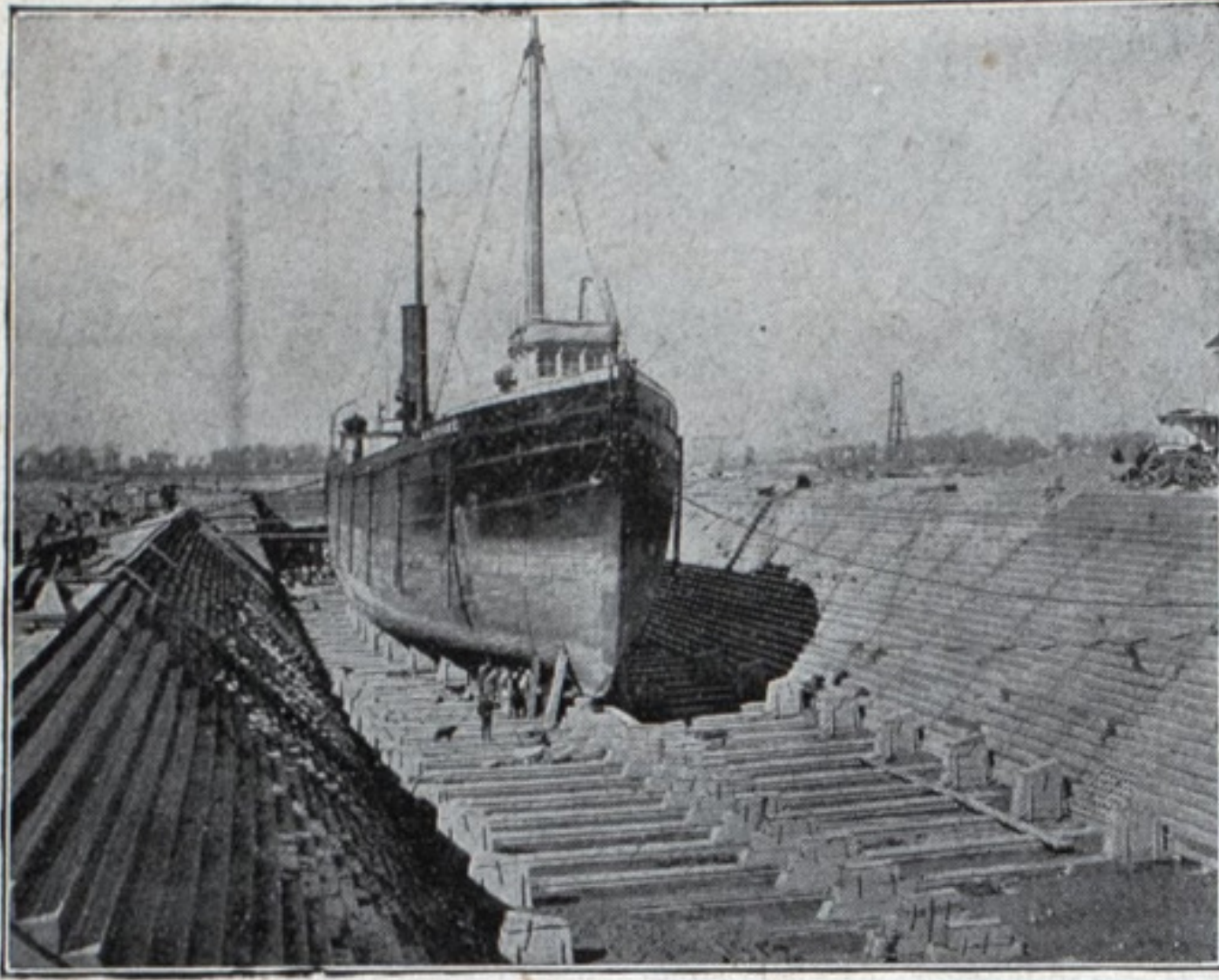
**Sellers'  
Restarting  
Injector**

A strictly first class  
machine at moderate  
cost. Perfectly auto-  
matic, has wide  
range of capaci-  
ties, and raises  
water promptly  
with hot or cold pipes. Very simple,  
has few parts and is easily repaired.  
All parts interchangeable, made of the  
best bronze, and the workmanship is  
perfect. Send for special catalogue de-  
scriptive of this Injector.

**JENKINS BROTHERS, Selling Agts.**  
New York, Boston, Phila., Chicago.

**A. J. MORSE & SON.**  
**DIVING APPARATUS**  
140  
**CONGRESS ST. BOSTON.**





# Craig Ship Building Co.

TOLEDO, OHIO.

New Dry-Dock 450 feet long, 110 feet wide on top, 55 feet wide on bottom, 16 feet water on sill.

Repairs to Metal and Wooden Ships  
a Specialty.

**Metal**  
and **Wooden**  
**Ship Builders.**



## Simpson Dry-Dock Co.

General Contractors and Consulting Engineers,

BUILDERS OF

**Simpson's Patent Dry-Dock,**

35 BROADWAY, NEW YORK.

## FOR SALE.

The hull of the steamer Andy Johnson, length 165 feet, beam 26 feet, depth 10 feet. This boat has been in dry dock, had bottom calked and repaired. With a small outlay this boat would make a barge with a capacity of 400,000 lumber, 700 tons coal. Could be changed a steam barge. Hull in good condition, now lying at this port. Price, \$1,700. We have also a customer who wants to buy a steam barge 400 M or better, lumber capacity; light draft, able to tow two barges of like size. Also a passenger boat, 6 feet draft, 10 mile speed; must be in good condition. Also two tow barges 700 to 800 M lumber. If you want to buy make your wants known, or have anything to sell quote price and terms to us and we will try and get you a customer. Also two fine farms on St. Clair river for sale. Fire insurance at the lowest rates.

KENDALL MARINE REPORTING CO., Port Huron, Mich.

LIFE BOATS.

YAWLS.

LIFE RAFTS.

## DETROIT BOAT WORKS

DETROIT, MICH.

STEEL, IRON AND WOODEN TUGS.

STEAM AND SAIL YACHTS.

ALL KINDS OF PLEASURE BOATS, FISHING AND HUNTING BOATS,  
SHELLS, BARGES, GIGS AND CANOES.

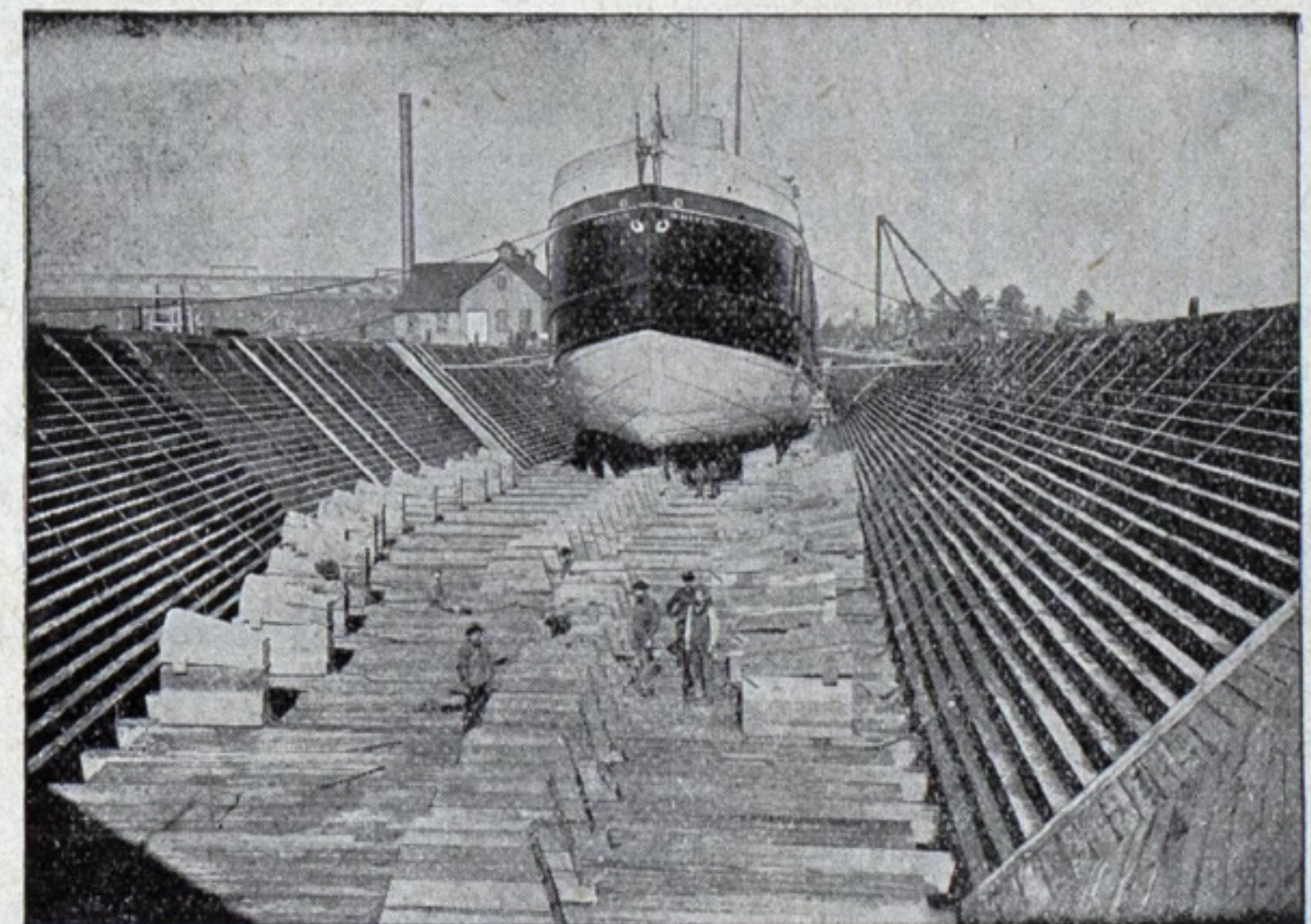
## Superior Ship Building Co.

### STEEL AND METAL SHIPS

Of all Classes built on shortest possible notice at our yards at  
**WEST SUPERIOR, WIS., and also at EVERETT, WASH.**

PHOTOGRAPH OF 300-FOOT BOAT IN DOCK.

Plates and  
Material  
always on  
hand to  
repair all  
kinds of  
Metal  
Ships in  
Shortest  
Time.



Best  
Quality of  
Oak in  
Stock  
for  
Repairing  
Wooden  
Vessels  
of all  
Classes.

SIZE OF DOCK			
Length, Extreme.....	587 feet.	Entrance, Top.....	55 feet 9 in.
Breadth, Top.....	90 " 4 in.	Entrance, Bottom.....	50 "
Breadth, Bottom.....	52 "	Depth over Sills.....	18 "

**LARGEST DRY-DOCK ON THE LAKES.**

Prices for Repairs and Docking  
same as at Lower Lake Ports.

**SUPERIOR, WIS.**

A Number of Propeller Wheels in Stock at Dry-Dock.

W. S. JENKS, President.

O. L. JENKS, Vice Pres. and Treas.

A. M. CARPENTER, Sec. and Gen'l Mgr.

# The Jenks Ship Building Co.

For Sale or Charter

Steamers H. E. Runnels,  
Linden,  
Black Rock.

Tug W. G. Mason.



**Steel and Wood Ship Builders.**  
**Marine Engines and Boilers.**



Office and Machine Shops  
Fourth Street.

Yards  
Foot of Lincoln Ave.

**Port Huron, Mich.**

—STEAM WINDLASSES, CAPSTANS AND STEERING APPARATUS—